

DAE ZPW

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Approved for use through 04/30/2003. OMB 0851-0032  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

# FEE TRANSMITTAL for FY 2003

Effective 01/01/2003. Patent fees are subject to annual revision.

☒ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$) 130

## Complete if Known

Application Number	10/032,535
Filing Date	01/02/2002
First Named Inventor	Shaw, John C.
Examiner Name	Nguyen, Nga B.
Art Unit	3628
Attorney Docket No.	

## METHOD OF PAYMENT (check all that apply)

☐ Check ☒ Credit card ☐ Money Order ☐ Other ☐ None

☐ Deposit Account:

Deposit Account Number  
Deposit Account Name

The Commissioner is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☒ Credit any overpayments  
☐ Charge any additional fee(s) during the pendency of this application  
☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

## FEE CALCULATION

### 1. BASIC FILING FEE

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1001	750	2001	375	Utility filing fee	
1002	330	2002	165	Design filing fee	
1003	520	2003	260	Plant filing fee	
1004	750	2004	375	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	

SUBTOTAL (1) (\$)

### 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims		Extra Claims		Fee from below		Fee Paid	
Independent		-20** =		X		=	
Multiple Dependent		-3** =		X		=	

Large Entity		Small Entity		Fee Description
Fee Code	Fee (\$)	Fee Code	Fee (\$)	
1202	18	2202	9	Claims in excess of 20
1201	84	2201	42	Independent claims in excess of 3
1203	280	2203	140	Multiple dependent claim, if not paid
1204	84	2204	42	** Reissue independent claims over original patent
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$)

\*\*or number previously paid, if greater; For Reissues, see above

## FEE CALCULATION (continued)

### 3. ADDITIONAL FEES

Large Entity Small Entity

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for ex parte reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	
1252	410	2252	205	Extension for reply within second month	
1253	930	2253	465	Extension for reply within third month	
1254	1,450	2254	725	Extension for reply within fourth month	
1255	1,970	2255	985	Extension for reply within fifth month	
1401	320	2401	160	Notice of Appeal	
1402	320	2402	160	Filing a brief in support of an appeal	
1403	280	2403	140	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive - unavoidable	
1453	1,300	2453	650	Petition to revive - unintentional	
1501	1,300	2501	650	Utility issue fee (or reissue)	
1502	470	2502	235	Design issue fee	
1503	630	2503	315	Plant issue fee	
1480	130	1480	130	Petitions to the Commissioner	\$130
1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	
1808	180	1808	180	Submission of Information Disclosure Stmt	
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	750	2809	375	Filing a submission after final rejection (37 CFR 1.129(a))	
1810	750	2810	375	For each additional invention to be examined (37 CFR 1.129(b))	
1801	750	2801	375	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	

Other fee (specify)

\*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$) 130

## SUBMITTED BY

Name (Print/Type)	John A. Galbreath	Registration No. (Attorney/Agent)	46718	Telephone	410-628-7770
Signature		Date	6/30/05		

**WARNING:** Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



In the United States Patent and Trademark Office

Serial Number: 10/032,535

Appn. Filed: 01/02/2002

Applicant(s): John C. Shaw et al.

Appn. Title: Method and System for Facilitating Secure Transactions

Examiner/GAU: Nguyen, Nga B. / 3628

**Petition To Make Special**

Mail Stop Petition  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir or Madam:

Applicant hereby petitions to make the above-referenced application special under 37 C.F.R. 1.102 and MPEP 708.02 (II), due to infringement of the application's claims that is occurring in the marketplace. A fee transmittal form and credit card payment form authorizing \$130.00, the petition fee for a small entity, are attached to this petition. The necessary showings in support of this petition are set forth below:

**I. Showing that there is an infringing device or product actually on the market or method in use.**

The infringer is Liquidnet, Inc., which offers a platform for trading large blocks of securities anonymously. Liquidnet connects to traders' Order Management Systems ("OMS"), thereby receiving indications of interest from buyers and sellers into its central processing system. Liquidnet compares the indications of interest to determine matches. If a match is found, Liquidnet informs contraparties of the match and provides contact information, in the form of contra-order

information and an Internet link to the other party. The counterparties then negotiate directly to consummate the transaction.

Liquidnet's method is precisely what Applicant's patent application discloses and claims, in independent Claims 35 and 51 as well as other dependent claims. In fact, even the *motivation* expressed by Liquidnet for practicing its method – to preserve anonymity and prevent the impact of large trades on the price of the security – exactly matches the objects and advantages disclosed in the application.

Copies of numerous articles from leading financial and securities publications like *Barron's*, *Wall Street & Technology*, *Money*, and *Securities Industry News* are attached, along with a presentation by a senior economist with the Capital Markets function of the Federal Reserve Bank of New York and a letter from the U.S. Department of Labor to Liquidnet's attorney discussing its method. In these publications, the Liquidnet method is discussed in detail by leading authorities in the securities industry and by Liquidnet personnel themselves.

These publications make clear that Liquidnet's method infringes the application claims, and that the infringing method is actually on the market and in use. In fact, Liquidnet is building a thriving business by infringing Applicant's claims. Liquidnet's trading volume grew 60% in the first quarter of 2005, vs. the year-ago quarter (see Article 1, "Liquidnet's SEC Relief").

## **II. Rigid comparison of the alleged infringing device, product, or method with the claims of the application, showing that some of the claims are unquestionably infringed.**

Independent claims 51 and 35 are being infringed, along with various dependent claims thereof. A discussion for each of these independent claims follows:

### **Claim 51**

Independent Claim 51 of Applicant's application # 10/032,535 defines:

An information management system for confidentially identifying counterparties to a transaction and introducing them and/or their agents to each other in order to allow them to negotiate the transaction, consisting of:

means for receiving indications of interest from potential buyers and sellers into a central processing system;

means for confidentially and anonymously comparing the received indications of interest from potential buyers and potential sellers to determine whether a match has occurred, and thus whether counterparties to a transaction have been identified;

means for informing identified counterparties that a match has occurred and for providing contact information between the identified counterparties so that further negotiations may take place between the counterparties to consummate their mutually desired transaction.

A comparison chart rigidly comparing each element of Claim 51 to the method Liquidnet is practicing, as described in the articles, follows:

<b><u># 10/032,535 - Claim 51</u></b>	<b><u>Relevant Article Passages</u></b>	<b><u>Comments &amp; Analysis</u></b>
An information management system for confidentially identifying counterparties to a transaction and introducing them and/or their agents to each other in order to allow them to negotiate the transaction,	Article # 1: "Liquidnet...is tied into members' order blotters, where it sits in the background looking for matches. When it finds one, it merely alerts the two members that there's a potential trade; the members, who remain anonymous to one another, take it from there."	The interest indications gotten from members' order blotters constitute the "information" Liquidnet manages. Confidentiality / anonymity is a key element of both the invention and Liquidnet's method. The two members who are alerted are the "counterparties", who once alerted negotiate the transaction.
consisting of:		
means for receiving indications of interest from potential buyers and sellers into a central processing system;	<p>Article # 2: "The Liquidnet scheme has three parts. First, it plugs into the OMSs of the largest trading desks over the Internet and amalgamates all the orders."</p> <p>Article # 3: "Orders input into a user's order management system automatically flow into Liquidnet. Those orders are considered only indications, and not committed orders."</p>	The portion of Liquidnet's system that plugs into the OMSs of its clients is its "means for receiving indications of interest". Liquidnet amalgamates all those indications of interest into its central processing system.

	<p>Article # 4: "Liquidnet connects directly to the order management systems of buy-side firms and continuously scans for potential matches between clients."</p> <p>Article # 5: "Clients plug the Liquidnet trading system into their electronic order management system."</p> <p>Article # 6: "[T]he Liquidnet system: (1) interfaces with the order management systems of Liquidnet's subscribers; and (2) identifies, with respect to a particular security, each Liquidnet subscriber that has an interest in buying the security and each Liquidnet subscriber that has an interest in selling the security."</p> <p><b>Note:</b> See also the various other articles that establish Liquidnet's practice of receiving indications of interest from potential buyers and sellers into its central processing system.</p>	
<p>means for confidentially and anonymously comparing the received indications of interest from potential buyers and potential sellers to determine whether a match has occurred, and thus whether counterparties to a transaction have been identified;</p>	<p>Article # 1: "Liquidnet..sits in the background looking for matches...the members, who remain anonymous to one another"</p> <p>Article # 2: "The Liquidnet scheme has three parts... [s]econd, it displays to traders select contra-orders to those in their OMSs."</p>	<p>Liquidnet clearly compares the indications of interest to determine matches and counterparties, while preserving the traders' anonymity.</p>

	<p>Article # 3: "Liquidnet ...allows buy-side institutions to trade blocks of equities anonymously among each other...traders will only see information on buy or sell positions if they have a contra side to those positions"</p> <p>Article # 4: "Liquidnet... continuously scans for potential matches between clients."</p> <p>Article # 6: "If one subscriber indicates to the Liquidnet system an interest in buying a certain security that a different subscriber has independently indicated to the Liquidnet system an interest in selling"</p> <p><b>Note:</b> See also the various other articles that demonstrate that Liquidnet anonymously compares the indications of interest to determine matches and counterparties.</p>	
<p>means for informing identified counterparties that a match has occurred and for providing contact information between the identified counterparties so that further negotiations may take place between the counterparties to consummate their mutually desired transaction.</p>	<p>Article # 1: When it [Liquidnet] finds one [a match], it merely alerts the two members that there's a potential trade"</p> <p>Article # 2: "Second, it [Liquidnet] displays to traders select contra-orders to those in their OMSs."</p> <p>Article # 4: "When a potential match is found, a pop-up notice appears on the user's screen."</p>	<p>Liquidnet informs counterparties of the match and provides contact information, in the form of contra-order information and an Internet link to the other party – thereby allowing further negotiations to take place between the counterparties.</p>

	<p>Article # 5: "If Liquidnet sees that one client wants to buy a security that another wants to sell, it suggests that they negotiate (by indicating this fact on their workstations). The clients contact each other through an anonymous message. They negotiate via a Liquidnet messaging window. If they agree, they report to Liquidnet who crosses the trade."</p> <p>Article # 6: "The Liquidnet system notifies both subscribers that a transaction opportunity exists... The two subscribers may then negotiate"</p> <p><b>Note:</b> See also the various other articles that show that Liquidnet informs contraparties of the match and provides contact information so further negotiations may take place between the contraparties.</p>	
--	---	--

### **Claim 35**

Independent Claim 35 of Applicant's application # 10/032,535 defines:

A method for anonymously and confidentially identifying contraparties to a transaction and disclosing contact information to the contraparties between the contraparties in order to allow them to negotiate a transaction, comprising the steps of:

receiving indications of interest from potential buyers and sellers into a central processing system, each indication of interest involving a purchase or sale of a specific item;

anonymously comparing indications of interest received from potential buyers with indications of interest from potential sellers within the central processing system to determine whether a match has occurred;

identifying counterparties to a transaction based on said determination of whether a match has occurred;

notifying each of the counterparties to a transaction that a match has occurred;

providing contact information to each of the counterparties to a transaction to allow the counterparties to contact each other to negotiate their transaction; and

consummating the transaction between the counterparties through direct negotiation between the counterparties.

A comparison chart rigidly comparing each element of Claim 35 to the method Liquidnet is practicing, and which is described in the articles, follows:

<b><u># 10/032,535 - Claim 35</u></b>	<b><u>Relevant Article Passages</u></b>	<b><u>Comments &amp; Analysis</u></b>
A method for anonymously and confidentially identifying counterparties to a transaction and disclosing contact information to the counterparties between the counterparties in order to allow them to negotiate a transaction,	Article # 1: "Liquidnet...is tied into members' order blotters, where it sits in the background looking for matches. When it finds one, it merely alerts the two members that there's a potential trade; the members, who remain anonymous to one another, take it from there."	Liquidnet identifies counterparties to a transaction by matching indications of interest from members' order blotters. Confidentiality / anonymity is a key element of both the invention and Liquidnet's method. The counterparties, once alerted, contact each other and negotiate the transaction.
comprising the steps of:		
receiving indications of interest from potential buyers and sellers into a central processing system, each indication of interest involving a purchase or	Article # 2: "The Liquidnet scheme has three parts. First, it plugs into the OMSs of the largest trading desks over the Internet and amalgamates all	Liquidnet's system receives indications of interest by plugging into the OMSs of its clients. The "interest" is in buying or selling a specific

<p>sale of a specific item;</p>	<p>the orders.”</p> <p>Article # 3: “Orders input into a user’s order management system automatically flow into Liquidnet. Those orders are considered only indications, and not committed orders.”</p> <p>Article # 4: “Liquidnet connects directly to the order management systems of buy-side firms and continuously scans for potential matches between clients.”</p> <p>Article # 5: “Clients plug the Liquidnet trading system into their electronic order management system.”</p> <p>Article # 6: “[T]he Liquidnet system: (1) interfaces with the order management systems of Liquidnet’s subscribers; and (2) identifies, with respect to a particular security, each Liquidnet subscriber that has an interest in buying the security and each Liquidnet subscriber that has an interest in selling the security.”</p> <p><b>Note:</b> See also the various other articles that establish that Liquidnet performs the “receiving indications of interest” step.</p>	<p>security. Liquidnet amalgamates all those indications of interest into its central processing system.</p>
<p>anonymously comparing indications of interest received from potential buyers with indications of interest from potential sellers within the central processing system to</p>	<p>Article # 1: “Liquidnet..sits in the background looking for matches...the members, who remain anonymous to one another”</p>	<p>Liquidnet clearly compares the indications of interest it “scraped” from its members’ order blotters, and which now reside on its central processing system, to determine matches</p>

determine whether a match has occurred;	<p>Article # 2: “The Liquidnet scheme has three parts... [s]econd, it displays to traders select contra-orders to those in their OMSs.”</p> <p>Article # 3: “Liquidnet ...allows buy-side institutions to trade blocks of equities anonymously among each other...traders will only see information on buy or sell positions if they have a contra side to those positions”</p> <p>Article # 4: “Liquidnet... continuously scans for potential matches between clients.”</p> <p>Article # 6: “If one subscriber indicates to the Liquidnet system an interest in buying a certain security that a different subscriber has independently indicated to the Liquidnet system an interest in selling”</p> <p><b>Note:</b> See also the various other articles that demonstrate that Liquidnet anonymously compares the indications of interest to determine if a match has occurred .</p>	while preserving the traders’ anonymity.
identifying counterparties to a transaction based on said determination of whether a match has occurred;	Same articles as for the “matching step”	See above analysis for the “matching” step – Liquidnet obviously knows who the counterparties are, and indeed <i>must</i> know in order to notify the counterparties of the match.

<p>notifying each of the counterparties to a transaction that a match has occurred;</p>	<p>Article # 1: When it [Liquidnet] finds one [a match], it merely alerts the two members that there's a potential trade"</p> <p>Article # 2: "Second, it [Liquidnet] displays to traders select contra-orders to those in their OMSs."</p> <p>Article # 4: "When a potential match is found, a pop-up notice appears on the user's screen."</p> <p>Article # 5: "If Liquidnet sees that one client wants to buy a security that another wants to sell, it suggests that they negotiate (by indicating this fact on their workstations)."</p> <p>Article # 6: "The Liquidnet system notifies both subscribers that a transaction opportunity exists."</p> <p><b>Note:</b> See also the various other articles that demonstrate that Liquidnet performs the notifying step.</p>	<p>Liquidnet notifies counterparties of the match.</p>
<p>providing contact information to each of the counterparties to a transaction to allow the counterparties to contact each other to negotiate their transaction; and</p>	<p>Article # 2: "Second, it [Liquidnet] displays to traders select contra-orders to those in their OMSs."</p> <p>Article # 4: "When a potential match is found, a pop-up notice appears on the user's screen."</p> <p>Article # 5: "[Liquidnet] suggests that [the counterparties] negotiate (by indicating this</p>	<p>Liquidnet provides contact information, in the form of contra-order information and an Internet link to the other party – thereby allowing further negotiations to take place between the counterparties.</p>

	fact on their workstations). The clients contact each other through an anonymous message.”	
consummating the transaction between the counterparties through direct negotiation between the counterparties.	<p>Article # 1: “the members, who remain anonymous to one another, take it from there.”</p> <p>Article # 5: [The counterparties] negotiate via a Liquidnet messaging window. If they agree, they report to Liquidnet who crosses the trade.”</p> <p>Article # 6: “The Liquidnet system notifies both subscribers that a transaction opportunity exists... The two subscribers may then negotiate”</p> <p><b>Note:</b> See also the various other articles that show the direct negotiation and consummating step.</p>	The transaction is consummated via the counterparties’ direct negotiation.

Further, various dependent claims of Claim 35 are also being infringed. For example, Claims 36-37 further define that the indication of interest involves, respectively, an equity, debt, or derivative security. As the articles indicate, the Liquidnet system is being used to trade at least equity securities, and is likely being used to trade other types of securities as well.

**III. Statement that a careful and thorough search of the prior art has been made, or that Applicant has a good knowledge of the pertinent prior art.**

Applicant/assignee of the entire interest Harborside Plus, Inc. has a good knowledge of the pertinent prior art. They have been actively researching and monitoring this technology since its inception by Harborside (they invented the technology before even the first priority date claimed – May 1999), and have not found any prior art to cast doubt on the reasonableness of expecting full

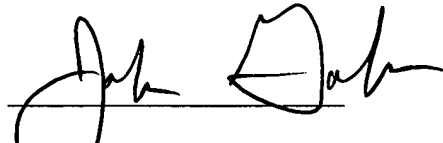
grant of the patent claims. In addition, a careful and thorough search of the prior art was made upon filing this application, and two separate Information Disclosure Statements were submitted.

**IV. Copy of each of the prior art references deemed most closely related to the subject matter of the claims.**

Copies are also attached of the prior art references deemed most relevant to the claimed subject matter: U.S. Patent Nos. 5,689,652 to Lupien (assignee: OptiMark); 3,573,747 to Adams (assignee: Instinet); 5,727,165 to Ordish (assignee: Reuters); 5,077,665 to Silverman (assignee: Reuters); and 4,412,287 to Braddock.

Finally, it must be pointed out that this application was filed as a continuation-in-part application on January 2, 2002 - or three and a half years ago. Moreover, the prior applications on which this application was based were filed in May 2000, and these prior applications claim priority from provisional applications filed in May 1999. Given this, Applicant justifiably believes that his application is overdue for examination, even without the infringement which necessitates this Petition to Make Special. Applicant accordingly requests that its petition be granted, and that its application be examined as soon as possible.

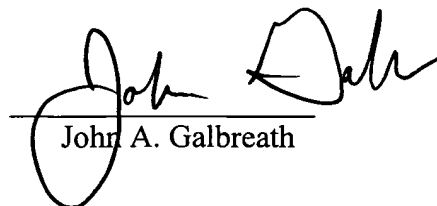
Very respectfully,



John A. Galbreath  
Reg. # 46,718  
Galbreath Law Offices, P.C.  
2516 Chestnut Woods Court  
Reisterstown, MD 21136  
Tel. (410) 628-7770

Certificate of Mailing: I certify that on the date below, this document and referenced attachments, if any, was mailed to the U.S. Patent Office via first-class U.S. Mail, postage prepaid, to Mail Stop Petition, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

1 July 2005



John A. Galbreath



## **ARTICLES IN SUPPORT OF PETITION TO MAKE APPL. # 10/032,535 SPECIAL**

1. "Liquidnet's SEC relief", *Securities Industry News*.
2. "Merrin's Solution to Liquidity Problem", *Traders Magazine*.
3. "Liquidnet to Build Interfaces With Four OMSs", *Securities Industry News*.
4. "Fund Managers Look to Alternatives", *Euromoney*.
5. "Stocks: Liquidity, Valuation, and Market Regulation", presentation by Asani Sarkar, Senior Economist with the Capital Markets function of the Federal Reserve Bank of New York (see page 17).
6. "DOL Says Fund Use of Electronic Trading Will Not Violate ERISA", *Pensions & Investments* (see attached letter from DOL's Louis Campagna to Liquidnet's attorney William Charyk, which is referred to in the article).
7. "Liquidnet Reports Q1 2005 Results", *Finextra.com*.
8. "Fair Access and Block Trading", *Securities Industry News*.
9. "Liquidnet To Offer Direct Trading", *Pensions & Investments*.
10. "The Secret Matchmaker", *Business 2.0*.
11. "Will Liquidnet Catch the Buy Side?", *Wall Street & Technology*.
12. "Your Fund Vs. Wall Street", *Money*.
13. "New Kids on the Block", *Wall Street & Technology*.
14. "A New Law of Large Networks", *Barron's Online*.
15. "Shhh, Liquidnet is Quietly Trading Stocks in Huge Blocks for Institutional Investors", *New York Times*.
16. "Internal Politics Divide", *The Banker*.
17. Liquidnet Press Release.
18. "Advent's Moxy® Trade Order Management System Leads in Automated Connectivity to Trade Counterparties", *Guide to Software & Technology in Asset Management, Banking & Risk Management*.

Research  
Databases

Sign In to My EBSCOhost

[New Search](#) | [View Folder](#) | [Preferences](#) | [Help](#)

Thesaurus

Language

1 of 47 [Result List](#) | [Refine Search](#) [Print](#) [E-mail](#)[Save](#) [Add to folder](#)[Folder is empty.](#)Formats: [Citation](#) [PDF Full Text \(2.2MB\)](#)**Title:** *Liquidnet's SEC Relief; MarketAxess Advances. (cover story)***Authors:** Sisk, Michael**Source:** Securities Industry News; 5/9/2005, Vol. 17 Issue 18, p1, 2p, 1c**Document Type:** Article**Subject Terms:** \*CORPORATIONS – Finance  
\*DERIVATIVE securities  
\*STOCK exchanges  
\*SECURITIES trading volume**Company/Entity:** LIQUIDNET Inc.**NAICS/Industry Codes:** 52321 Securities and Commodity Exchanges**Abstract:** Provides information on the financial results of *Liquidnet* and MarketAxess for the first quarter of 2005. Increase in trading volume of the companies; Average daily volume for the U.S. equity trades; Plans of MarketAxess to launch credit derivatives.**ISSN:** 1089-6333**Accession Number:** 16998296**Persistent link to this record:** <http://search.epnet.com/login.aspx?direct=true&db=buh&an=16998296>**Database:** Business Source PremierFormats: [Citation](#) [PDF Full Text \(2.2MB\)](#)

# Securities Industry News

May 9, 2005

What Makes Markets

www.securitiesindustry.com

## Waterhouse Embraces ADP's New Paradigm

By JOHN HINTZE  
Correspondent

Automatic Data Processing announced last week that TD Waterhouse has signed on for its new model of servicing broker-dealers' back-office needs—a combination of self-clearing and outsourcing that may kick off a paradigm shift in clearing and securities processing. At least one major ADP rival, Fidelity Investments' National Financial unit, is in hot pursuit.

TD Waterhouse is buying ADP's hybrid—or "third way"—between self-clearing, which the computer servicer has supported for years with its trade-processing software, and fully disclosed correspondent clearing. The approach, spurred by two ADP acquisitions last year, presumably delivers the best of both worlds: A firm can retain desired self-clearing functions and outsource the costly headaches, while fully disclosed firms get a migration path toward self-clearing.

"The self-clearing benefits are the typical ones: The firm retains control around its order flow and doesn't have to share

revenue associated with margin (accounts), interest income and basis points on mutual fund assets and money-market balances," says Brian Herte, SVP of brokerage operations at TD Waterhouse in New York. "At the same time, we're able to reduce our fixed expenses on the labor-related side" in clearing and custody functions, a benefit broker-dealers typically seek from correspondent clearing relationships.

ADP closed the acquisitions last fall of Bank of America Broker-Dealer Services, a clearing firm catering to full-service correspondents, and U.S. Clearing, a subsidiary of Fleet Financial (now part of BofA) that largely cleared for discount brokerages. The acquisitions quickly turned the New Jersey-based processor into one of the largest clearers, with more than 200 correspondents. It had begun promoting the hybrid option several months before it actually completed the deals, and promised that a first client was on the way.

Earlier this year, ADP hired Joe Barra as president of ADP Clearing & Out-

Continued on page 32

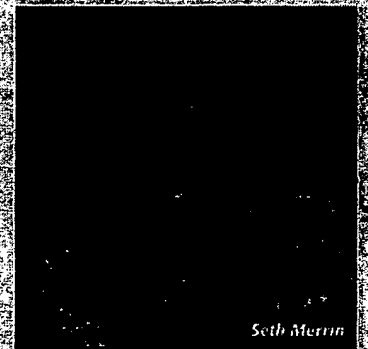
## Liquidnet's SEC Relief; MarketAxess Advances

By MICHAEL BIRN  
Correspondent

First-quarter results from Liquidnet, an electronic block-trading platform for equities, and MarketAxess, an online marketplace for corporate bonds, are any indication, traders are bullish on electronic trading. Both firms posted 20 percent increases in trading volume.

For Liquidnet, the good news did not end there. The company's CEO, Seth Merrin, says that he has verbal assurances from the Securities and Exchange Commission's Robert Colby, deputy director of the market regulation division, that Liquidnet will be exempted from Regulation NMS rules that might have made the company's business model untenable.

The final version of Reg NMS is still forthcoming, of course, and understanding how the SEC's principles get implemented is purely a guessing game at this point. But beyond the verbal assurance from Colby, Merrin told *Securities Industry News* last week, the SEC has now asked the block-trading exchange to "create wording around the exception." Merrin praised the SEC's willing-



Seth Merrin

ness to listen to Liquidnet's concerns, adding, "We're cautiously optimistic that it will work out for the firm."

Liquidnet's luck seems to be running hot. During the first quarter of 2005, it grew the number of names it traded across all capitalizations. Liquidnet member firms—there are now 265, with 55 candidates in the queue—traded 100 percent of the block vol-

Continued on page 33

## INSIDE

### ON THE RECORD:

NYSE's Roger Burkhardt

PAGE 6

Archipelago's Gerald Putnam

PAGE 32

Hedge Funds Get the Two-Year Itch

PAGE 10

### THE TALK OF TECH

Sewis: The Other L1... Page 11

Wire Transfers: Trouble Feels Page 12

IT Spending Forecast Page 14

Orchestra's Debut Page 16

Where Shadow Shines Page 30

Satyam-CluSoft Page 35

## Institutions Find EUSD Taxing

By CHRIS KENTOURIS  
Senior International Editor

Two months before the European Union Savings Tax Directive (EUSD)—a set of stringent guidelines on withholding tax for debt instruments and investment funds—takes effect, financial institutions across the U.K. and the Continent are scrambling to prepare themselves and their clients for the operational challenges. Technology vendors, meanwhile, are having a field day.

Data management software vendor AIM Software was first to market in March with a release routing a new EUSD-compliant module for its Gain Desktop system. Last week, Telekurs boasted of being appointed by the Swiss Tax Authority as its "official data provider" for information on financial instruments affected by the EUSD. The Zurich-head-

quartered vendor also announced it had been "accredited" by the Luxembourg Bankers' Association.

"We're providing interfaces for the special EU Savings Tax Directive data feeds from Telekurs, Reuters, Bloomberg, Fininfo, FT Interactive Data and other vendors," said AIM Software consultant Christian Truka. "We are also extending interfaces from Gain to other banking applications, such as Apys and Olympic, and can provide standard reports for tax authorities."

About a dozen of AIM Software's 70 clients worldwide reside in Switzerland and Luxembourg and have licensed the EUSD module. Because they are tax havens, these two countries are expected to be the hardest hit by the directive. Many Europeans

Continued on page 34

To subscribe, call (800) 607-1967



Research  
Databases

Sign In to My EBSCOhost

[New Search](#) | [View Folder](#) | [Preferences](#) | [Help](#)

Basic Search	Advanced Search	Database Search
Reviews	Publications	Company Profiles
Thesaurus	Language	
Indexes	Cited References	

45 of 47 [Result List](#) | [Refine Search](#) [Print](#) [E-mail](#)  
 [Save](#) [Add to folder](#) [Folder is empty.](#)

Formats: [Citation](#) [HTML Full Text](#)**Title:** Merrin's Solution to Liquidity Problem.**Authors:** [Chapman, Peter](#)**Source:** [Traders Magazine](#); Oct2000, Vol. 13 Issue 173, p54, 3p, 1c**Document Type:** Article**Subject Terms:** \*PROGRAM trading (Securities)**People:** [MERRIN, Seth](#)**Abstract:** Focuses on Seth Merrin's *LiquidNet* in which traders would have the option of negotiating the trades with their counterparts. Practical problems foreseen by some in using it; Three parts of the *LiquidNet* scheme; Benefits it can provide.**Full Text Word Count:** 1646**ISSN:** 0894-7295**Accession Number:** 3730889**Persistent link to this record:** <http://search.epnet.com/login.aspx?direct=true&db=buh&an=3730889>**Database:** Business Source Premier[Choose Language](#)

\* \* \*

**Section:** TRADING & TECHNOLOGY**MERRIN'S SOLUTION TO LIQUIDITY PROBLEM****A Better Mousetrap To Crush Market Impact?**

Lupien got it wrong.

Will Merrin get it right?

Seth Merrin, the technology pioneer widely credited with launching the order management system industry, is now vowing to do what others tried but failed at: eliminate market impact on block trades.

Merrin's new venture, *Liquidnet*, hopes to provide access in one gigantic pool of orders, the liquidity in the OMSs at the top buy-side firms.

The plan: Traders using **Liquidnet** will be electronically notified when the system has the other sides of orders on their blotters. The traders would then have the option of negotiating the trades with their counterparties.

"We are creating a country club kind of network," said Merrin, chief executive of **Liquidnet**, a 30-person operation based in New York. "All the members have the same problem-huge orders they must execute."

"The market impact is killing them because right now brokers are the only way they know to match up with other institutions," he added. "Market impact is an enormous problem."

Merrin had a hit ten years ago when he introduced the Merrin Financial Trading Platform (now owned by The MacGregor Group). Since then the installed base of these order-tracking and routing devices has ballooned to some 700. All told, they account for an estimated one billion shares in order flow each day, according to the Tower Group, a securities consulting group in Needham, Mass.

Traders agree that market impact, or the effect of a large trade on the price of a stock, is a costly overhead. But while they like the **Liquidnet** concept, some foresee practical problems in using it. "They say it's a passive system, but in practice the trader is going to have to make adjustments everyday on his OMS, or else he is going to run into problems," said one trader familiar with **Liquidnet**.

The **Liquidnet** scheme has three parts. First, it plugs into the OMSs of the largest trading desks over the Internet and amalgamates all the orders. Second, it displays to traders select contra-orders to those in their OMSs. Finally, it lets traders negotiate price and quantity among themselves via text chat. No sales traders are involved so no information is leaked, Merrin says. That eliminates the possibility of market impact, he says.

Unlike other trading systems, there is no inputting or monitoring of orders. Finding the other side is a completely passive process on **Liquidnet**. Liquidity is brought to the trader. The trader does not have to bring liquidity to the system.

Traders never know with whom they are dealing. They also do not know the total amount of the stock available for sale. They only know there is enough to at least match a predetermined minimum portion of their order.

Minimum quantities negotiated are based on parameters established by traders when they first connect to the system. A trader might specify he will only accept contras with at least 25 percent of his order. That way a buyer of one million shares, for example, would be dealing with a seller of at least 250,000 shares, if at all. (A million-share buyer would normally not want to deal with a 5,000-share seller.)

**Liquidnet** is only courting the largest institutions with OMSs. It says 134 have indicated an interest. Launching in December, it will not charge "members" a license fee for the technology. As a broker dealer and Securities and Exchange Commission-registered alternative trading system it will charge a pennies per-share fee on each transaction.

On its board of advisors are the head traders of Aim Advisors, Scudder Kemper Investments, Putnam Investments and T. Rowe Price.

"It holds great promise," said Leo Smith, Putnam's head trader. "It takes the promise of OptiMark and makes it easier. Ultimately it will be successful."

Smith notes that too many traders settle for the VWAP, or the volume-weighted average price of a stock over the course of the day, when transacting. "This will force people to make decisions. We're supposed to be traders, not VWAPers."

Like all other traders interviewed for this story he does not believe **Liquidnet** will completely replace the sales trader. "I look at it as another avenue to source liquidity," he said. "It's not totally doing away with

anything."

**Liquidnet** is not the first piece of technology to tackle market impact. Three systems aimed at block-traders have come and (mostly) gone over the years.

OptiMark Technologies, founded by Bill Lupien, was a multi-million dollar failure now partly on the auction block. @Harborside, an indications service, was yanked from the market by parent Jefferies after only six months in service. (Creator Richard Holway says it will be available again soon following some enhancements.) The Arizona Stock Exchange, a call auction system near death earlier this year, won a stay of execution when Goldman Sachs took a stake. All three suffered from a lack of liquidity.

Traders give various reasons for the failures including questionable anonymity, difficulty of use, time-consumption, and too many "nothing-dones." Merrin says Liquidnet avoids the first three problems and shifts the burden of the fourth to the trader.

Nothing-dones aren't likely to completely disappear, however, because a trader is under no obligation to trade. "They're not committed orders," Merrin acknowledged. "They're only indications really."

"Indications" in the strictest sense are those sellside-to-buyside e-mails suggesting trades. They have come in for criticism as brokers posting indications are often just "fishing," or trying to gauge the market with no intention to follow through. Thomson Financial's AutEx and Bridge are the two biggest operators of IOI networks.

The slippery nature of the "orders" concerned Kevin Cronin, head trader at AIM, at first. "That was one of the things I worked hard on," said Cronin, an adviser to **Liquidnet**. "We want to make sure the people in this system are people who really want to trade."

The system will monitor and score traders' accounts based on how often they negotiate. Other traders will be able to use those scores to determine the seriousness of a contra. If a trader frequently refuses to negotiate his rights will be revoked, according to Cronin.

"These are not just brokers fishing," he said. "[With **Liquidnet**] you can start the negotiation process with a guy because he says he's looking for exactly what you have."

Another trader predicts the rating will hurt "good" traders. They will get black marks from contras for not matching orders they consider unexecutable, but in the blotter anyway. He cites three examples. First, a user transacts over the phone while his order is still in **Liquidnet**. An angry contra watches a print go up and gives the trader a black mark.

Second, the trader is unwilling to negotiate an order on the blotter at current prices. Again, the contra complains. Third, the trader refuses to negotiate an order filled but not yet deleted from the OMS. Some buy-side shops don't clear out their OMSs until the end of the day when they allocate.

"Guys are going to have to start marking the orders they want to go into the system and those they don't," the trader said. "Once you get to that point what happens to the promised ease of use?"

On the flip side, **Liquidnet** appears to solve problems traders had with OptiMark and @Harborside. Because it allows them to see some size they are not flying blind as with OptiMark, or "OptiDark" as it was uncharitably called. "OptiMark never really helped us to understand supply and demand," Cronin said.

Because **Liquidnet** discloses no names it says it guarantees anonymity. Traders were never comfortable with the two sales traders in the middle of an @Harborside transaction.

Middlemen are considered the root of the market impact problem. Sales traders at brokerages leak information that moves prices. Even traders at successful systems like Instinet and Posit are said to leak

information. (Officials at Instinet and Posit deny this.)

**Liquidnet** is, of course, a middleman. And it plans to amass a huge amount of very valuable trading information. Merrin claims it's impenetrable. "Nobody within **Liquidnet** can see what is going on," he said. The startup hired accountants Ernst & Young to audit its processes and procedures to certify Merrin's claim.

Some traders are still not convinced of the utility of electronic middlemen. Brian Pears, head trader at mid-sized Wells Capital Management, is skeptical that bypassing the sales trader will necessarily result in better performance numbers.

"I'm not sure how much demand there really is for institutions only to be talking to each other," Pears said. "We all talk like that, but I think the buy-side relies on the sell-side for a lot more than they think they do. **Liquidnet** is an interesting idea, but it won't revolutionize the trading community. I don't think it will ever gain critical mass to the point where people say this is the way to trade."

Pears says a good sales trader can save him from making a bad trade. If he buys the first 100,000 shares from a seller of 2,000,000, the price he pays may look ridiculous once the remaining 1.9 million hit the Street. His sales trader can forewarn him that the other side may have more to do.

"That's what we would lose in negotiating over text chat with another buy-side trader," he said. "The sales trader is incented to protect their client somewhat."

Pears says he is willing to try the service, but it won't become a regular part of his routine unless it proves itself with liquidity.

Merrin acknowledges his system won't completely replace sales traders, but says the liquidity will be there:

"If we start off on Day One with the 100 largest institutions on the Street," he said, "we're going to have more market information in our system than the exchanges."

PHOTO (COLOR): Seth Merrin

~~~~~



By Peter Chapman

Copyright of **Traders Magazine** is the property of SourceMedia and its content may not be copied or e-mailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or e-mail articles for individual use.  
Source: **Traders Magazine**, Oct2000, Vol. 13 Issue 173, p54, 3p  
Item: 3730889

[Top of Page](#)

---

Formats:  Citation  HTML Full Text

◀ 45 of 47 ▶ [Result List](#) | [Refine Search](#)  Print  E-mail

 Save  Add to folder

 Folder is empty.

Research  
Databases

Sign In to My EBSCOhost

[New Search](#) | [View Folder](#) | [Preferences](#) | [Help](#)

|              |                  |                      |
|--------------|------------------|----------------------|
| Basic Search | Advanced Search  | Database Directories |
| Keyword      | Publication      | Company Profiles     |
| Indexes      | Cited References | Full Text            |
|              |                  | Language             |

42 of 47 ▸ [Result List](#) | [Refine Search](#) | [Print](#) | [E-mail](#)[Save](#) | [Add to folder](#)

Folder is empty.

Formats: [Citation](#) | [HTML Full Text](#)**Title:** *Liquidnet* to Build Interfaces With Four OMSs.**Authors:** Schroeder, Mary**Source:** Securities Industry News; 11/13/2000-11/29/2000, Vol. 12 Issue 43, p5, 1/4p, 1bw**Document Type:** Article**Subject Terms:** \*SECURITIES industry  
\*STOCKS**NAICS/Industry Codes:** 523 Securities, Commodity Contracts, and Other Financial Investments and Related Activities  
52321 Securities and Commodity Exchanges**Abstract:** Reports on equities trading system *Liquidnet's* deals with firms providing order management systems. Plan to build and support interfaces to the trading system; Description of how the *Liquidnet* system works.**Full Text Word Count:** 382**ISSN:** 1089-6333**Accession Number:** 3868316**Persistent link to this record:** <http://search.epnet.com/login.aspx?direct=true&db=buh&an=3868316>**Database:** Business Source Premier[Choose Language](#)

\* \* \*

**Section:** Automated Trading & Straight-Through Processing**LIQUIDNET TO BUILD INTERFACES WITH FOUR OMSS**

*Liquidnet*, an equities trading system for large buy-side firms developed by order management system pioneer Seth Merrin, has signed deals with firms providing four of the six largest order management systems. Advent Software, Eze Castle Software, and the MacGregor Group, whose systems include Predator and MFTP, will build and support interfaces to the new trading system.

The three firms combined have more than 400 customers, according to Merrin. While many of those customers do not fit the *Liquidnet* customer profile of the largest buy-side firms, enough do so that *Liquidnet* can achieve its goal of 100 participants on day one of operations, slated for the first quarter of next year, he said.

More than 165 firms have made commitments to link into the system, he said.

**Liquidnet** is also building interfaces to the other two largest order management systems—Longview Group and Charles River Data—was well as Sungard Investment Management Systems' Decalog, which has a smaller client base, Merrin said. The interfaces the vendors are building not only take the orders from users' blotters, but also post the executions back to their order management systems, he said. **Liquidnet** on its own can only build an interface one way, which means users have to manually enter the executions back into their order management systems, he said.

**Liquidnet** is a system that allows buy-side institutions to trade large blocks of equities anonymously among each other. Orders input into a user's order management system automatically flow into **Liquidnet**. Those orders are considered only indications, and not committed orders. Traders will only see information on buy or sell positions if they have a contra side to those positions and if the size of those positions corresponds to the size of the orders they have.

When the system is set up, a trader can determine that he or she only wants to see the contra side of orders that can, for example, fill 25 percent of the trader's order. The system will tell the trader there's someone else with the stock they want to buy or sell, but it doesn't reveal how much of that stock the other trader has.

PHOTO (BLACK & WHITE): Merrin

~~~~~

By Mary Schroeder

Copyright of **Securities Industry News** is the property of SourceMedia and its content may not be copied or e-mailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or e-mail articles for individual use.  
Source: Securities Industry News, 11/13/2000-11/20/2000, Vol. 12 Issue 43, p5, 1p  
Item: 3868316

[Top of Page](#)

---

Formats:  Citation  HTML Full Text

42 of 47  [Result List](#) | [Refine Search](#)  [Print](#)  [E-mail](#)

 [Save](#)  [Add to folder](#)

 [Folder is empty.](#)

Research  
Databases

Sign In to My EBSCOhost

[New Search](#) | [View Folder](#) | [Preferences](#) | [Help](#)

Basic Search	Advanced Search	Company Profiles
Keywords	Publications	Parameters
Language	Indexes	Cited References

26 of 47 [Result List](#) | [Refine Search](#) [Print](#) [E-mail](#) [Save](#) [Add to folder](#) [Folder is empty.](#)Formats: [Citation](#) [HTML Full Text](#)**Title:** Fund managers look to alternatives.**Authors:** [Koh, Peter](#)**Source:** [Euromoney](#); Jan2003, Vol. 34 Issue 405, p90, 2p**Document Type:** Article**Subject Terms:** [\\*CAPITALISTS & financiers](#)  
[\\*INVESTMENTS](#)  
[\\*MUTUAL funds](#)  
[\\*TRANSACTION costs](#)  
[\\*ELECTRONIC commerce](#)  
[ELECTRONIC systems](#)**NAICS/Industry Codes:** [523999](#) Miscellaneous Financial Investment Activities  
[52591](#) Open-End Investment Funds  
[4541](#) Electronic Shopping and Mail-Order Houses

**Abstract:** This article focuses on European alternative trading venues. The 2001 report of Paul Myners' review of institutional investment for Great Britain's government enjoins fund trustees to call their fund managers to account for their choices of trading methods and venues. The proportion of trading conducted over alternative venues in Europe is still small but it will undoubtedly grow as the Myners recommendations force investors and brokers to focus more closely on transaction costs related to market impact rather than commissions. *Liquidnet*, which launched in Europe at the end of November 2002, is the newest alternative venue available for European equities trading. *Liquidnet* connects directly to the order management systems of buy-side firms and continuously scans for potential matches between clients. E-Crossnet, launched in 2000, is an all electronic pan-European crossing network that works in a similar way to Posit, the oldest and best-established crossing network, with the exception that, like *Liquidnet*, it is a buy-side-only system.

**Full Text Word Count:** 1384**ISSN:** 0014-2433**Accession Number:** 9060035**Persistent link to this record:** <http://search.epnet.com/login.aspx?direct=true&db=buh&an=9060035>**Database:** Business Source Premier[Choose Language](#)

\* \* \*

**Equity trading**

## Fund managers look to alternatives

### Contents

#### Deep-rooted mistrust

#### Transaction costs (basis points) and savings from crossing

**With trading costs ring down on them, UK fund managers are tentatively exploring the savings offered by trading venues.**

THE NEXT FEW months will be an exciting time for European alternative trading venues. With a March deadline looming, UK fund managers and brokers will be examining these systems more closely as they work hard to show progress in implementing recommendations on transaction costs made in the Myners Report.

Among other things, the 2001 report of Paul Myners' review of institutional investment for the UK government enjoins fund trustees to call their fund managers to account for their choices of trading methods and venues. The choice of alternative trading venues is expanding and differentiating between them and deciding when and how to use the different strategies they offer is a challenge for managers.

The proportion of trading conducted over alternative venues in Europe is still small but it will undoubtedly grow as the Myners recommendations force investors and brokers to focus more closely on transaction costs related to market impact rather than commissions.

**Liquidnet**, which launched in Europe at the end of November 2002, is the newest alternative venue available for European equities trading. The company, which first launched in the US in April 2001, operates an innovative order-matching system that exclusively serves buy-side institutions. **Liquidnet** connects directly to the order management systems of buy-side firms and continuously scans for potential matches between clients. Users can choose to make their orders invisible to hedge funds if they wish and also to any other user whose order does not fill a minimum amount. When a potential match is found, a pop-up notice appears on the user's screen. He or she can then either choose to accept the price, negotiate further with complete anonymity or decline to deal.

E-Crossnet, launched in 2000, is an all-electronic pan-European crossing network that works in a similar way to Posit, the oldest and best-established crossing network, with the exception that, like **Liquidnet**, it is a buy-side-only system. As in Posit, traders choose to send in firm orders anonymously to be crossed at the mid-point price at fixed times throughout the trading day.

Posit is part of institutional investor trading services provider ITG, which can act as an electronic agency broker on any uncompleted trades if desired. Posit takes orders electronically, but also by phone or fax, and is open to both buy-side and sell-side institutions. This sets it apart from buy-side-only **Liquidnet** and E-Crossnet, giving it a wider pool of users. This is both an advantage and, some in the market would argue, a disadvantage.

### Deep-rooted mistrust

Until recently, fund managers had no choice but to deal with brokers, which act as intermediaries. The brokers work their orders and sometimes throw in some of their own capital to help execution. This system works well enough but many fund managers see real advantages in trading directly with each other.

Brokers work on behalf of many clients, so fund managers can never be sure that their own particular interests are being prioritized. Non-agency-only brokers also have their own interests that may conflict with those of a client and the information that brokers have about their clients means that there is always the possibility this will be used against them.

Mistrust of brokers runs surprisingly deep among some of their clients, hence the attraction of dealing directly with the like-minded. "When it's all buy-side institutions, you know you're dealing with people who are doing transactions for the long term, not just to make a quick buck," says the head of trading at a

global asset management firm. "You have more trust in doing transactions with people of similar motives."

The three alternative trading venues are all designed to reduce market-impact-related transaction costs to help users achieve best execution. They are competing for much of the same order flow. But their differences theoretically give them slightly different strengths that suit them to different types of orders or investor profiles.

**Liquidnet** is only available to buy-side institutions that have order management systems, a small but increasing proportion. The beauty of **Liquidnet** is that traders automatically see opportunities as they become available and that the system can be used any time throughout the day. The way it works suits it for trades in single names but means it is not that helpful for programme trading.

E-Crossnet is available to any fund manager with a Bloomberg terminal, and is suitable for single-name and programme trades for those who would prefer to trade directly with only buy-side firms when possible.

Instinet, the electronic agency broker, also runs a popular nightly crossing service.

Investors' use of these alternatives varies according to the particular structures of their trades. For block and programme trades, investors could benefit from using the crossing networks and **Liquidnet** as a first point of call and only then submitting the rest of the order to brokers or executing it through direct market access systems. Indeed some investment managers, including Legal & General, say that crossing first is a core part of their strategy for both index-tracking and active management activities.

E-Crossnet claims that it is the first point of call for between 7% and 22% of monthly share volumes in the UK, though not necessarily the venue on which they are finally executed.

The alternative venues are also particularly useful for reducing the market-impact costs of trades in less liquid stocks. Some 79% of the volume of UK stocks submitted on Posit is non-FTSE 100 names. In practice, however, fund managers still find the matching rates on the crossing networks and **Liquidnet** disappointing. But these will increase as more order flow is directed their way. Indeed it is hard to find a head of trading at a buy-side institution who does not intend to increase use of alternative venues. "We are using and will continue to increase our use of crossing networks," says Gunner Burkhart, head of trading at Deutsche Asset Management. "There is significant performance uplift to be had when successful but match rates have historically been very low."

If getting a trade done fast is a priority, dealing exclusively with other buy-side institutions becomes a luxury. Traditional brokers, committing capital, are a better bet. But for many investors the time taken to complete a trade is secondary to achieving the best price with minimum market impact. In these situations, a strategy might emerge of sending orders for crossing sequentially to E-Crossnet, then to Posit, and of continuing to use **Liquidnet** as and when matches arise.

At the moment buy-side traders still use the alternative trading venues only in a peripheral way. For highly liquid large-cap stocks, for example, the market impact of trades is less pronounced, and traders tend to take the attitude that it is not worth the effort of sending order flow on them to alternative trading venues.

But if buy-side firms increasingly trade directly between themselves, brokers become less important and will have to be able to demonstrate more clearly what it is they do that adds value.

Some brokers are working hard at this. Instinet has just rolled out a sophisticated new portfolio trading and execution management system called Newport. Morgan Stanley has also developed a powerful electronic trading system, TradeXL. What these systems do, apart from providing direct market access, is allow clients to see exactly how the trade is being executed in real time and to enable them to communicate or intervene.

Meanwhile, the ability of investment managers to justify trading decisions systematically and exploit

alternative venues is held back by a lack of technology to analyze transaction costs and broker performance and the limited use of order management systems.

In the UK the proportion of investment managers with order management systems is less than 50%. The proportion with transaction cost analysis software is about 20%. It will take investment up-front to cut regular trading costs.

### Transaction costs (basis points) and savings from crossing

Legend for Chart:

A - Country  
B - Commission  
C - Market impact and spread  
D - Total  
E - Savings from crossing(%)

A	B	C	D	E
France	21	60	81	88
Germany	20	75	95	89
Italy	20	54	74	86
Netherlands	20	51	71	86
Sweden	20	68	88	89
Switzerland	19	51	70	86
UK	14	78	92	89

Source: Myners Report



~~~~~

By Peter Koh

©Euromoney Institutional Investor PLC. This material must be used for the customer's internal business use only and a maximum of ten (10) hard copy print-outs may be made. No further copying or transmission of this material is allowed without the express permission of Euromoney Institutional Investor PLC. The most recent two editions of this title are only ever available at <http://www.euromoneyplc.com>

[Top of Page](#)

Formats:  Citation  HTML Full Text

◀ 26 of 47 ▶ [Result List](#) | [Refine Search](#)  Print  E-mail

 Save  Add to folder

 Folder is empty.

**ARTICLE 5**

**(See page 17)**

# **Stocks: Liquidity, Valuation and Market Regulation**

**Federal Reserve Bank of New York**

**Central Banking Seminar  
Preparatory Workshop in Financial Markets,  
Instruments and Institutions**

**Asani Sarkar**

**October 19, 2004**

# Historic Importance of Securities Markets

- In many countries, development of financial markets preceded sustained economic growth
- Example: US economic growth, 1780-1850
  - By reducing information asymmetry, banks and securities markets made borrowing cheaper and increased loan volume
  - Strong emphasis on corporate governance (e.g. frequent stockholder meetings, contested elections, firing of directors)
  - Share prices of ill-managed companies quickly dropped
  - Stock markets were integrated nationally and internationally, and reasonably liquid
  - Large manufacturing firms raised capital in active IPO markets
  - Banks made long-term equity investments in infrastructure firms
  - Foreign purchases of US securities increased the capital stock

# **Social Benefits of Equity Markets**

- Well-functioning equity markets benefit society through the positive externalities created by participating traders
- Well-functioning markets produce informative prices (i.e. close to the fundamental asset values)
  - Informative prices allow efficient production and allocation decisions
- For equity markets to function well, they must have low transactions costs and high liquidity
  - Price discovery is an important function of liquid markets

# Social Benefits of Liquid Markets

- Liquid markets result in large gains from trade
  - Traders exchange assets of lower immediate value for higher-valued assets, making all traders better off
  - Resources move to those who value them most, increasing productivity
- Liquid markets allow hedgers to divest unwanted risk
  - This reduces costs of specialization for producers
- Liquid markets facilitate efficient risk sharing
  - Entrepreneurs can raise capital at low cost and without taking on excessive risk
- Public policy should maximize the benefits of liquid markets

# Outline

- Valuation of stocks
  - Earnings, cash flows and dividends
  - Financial ratios
  - Small cap and large cap stocks
- Liquidity
  - Dimensions of liquidity
  - Price discovery and order flow externality
  - Liquidity and regulation
- Regulation
  - Consolidation versus fragmentation
- Conclusion

# Valuation of stocks

- Value of a stock is the discounted value of expected cash flows
- Discounting: future cash flows are worth less than present cash flows
- Future cash flows are uncertain, and depend on the financial prospects of the firm

# Sources of cash flows

- The source of all cash flows is the earnings of firms
- Earnings = Revenues - Cost of production
  - revenues typically come from sales of products
  - cost of production includes labor and material costs, but also interest on debt, corporate taxes, and allowance for depreciation

## Putting earnings to work

- Earnings: paid out to shareholders, or retained
- Pay out earnings to shareholders as cash dividends
- Use retained earnings to increase shareholder value
  - repurchase shares
  - retire debt
  - reinvest in assets (financial or real) that will increase future profits
- What are the costs and benefits of the four ways of using earnings? How do they differ by firms' age and growth prospects?

## Dividends and stock value

Theoretical stock value is present value of all future dividends:

$$P_0 = \sum_{t=1}^{\infty} \frac{DIV_t}{(1+r)^t} = \frac{DIV_1}{1+r} + \frac{DIV_2}{(1+r)^2} + \dots$$

- The discount rate,  $r$ , is the opportunity cost of capital, the rate of return shareholders can obtain by investing in other companies of similar risk
- Retained earnings increase value only to the extent that they are paid out as dividends later
- What about firms that pay no dividends?

# Financial ratios and stock returns

- Dividend yield (DY)=Dividend/Price
- Stock returns = Dividend yield + Capital gains  
= real earnings yield (E/P) on average
- Capital gains = growth rate in earnings per share (EPS) if P/E ratio is constant
  - returns = DY + earnings growth
- Capital gains = growth rate in dividends per share if D/E (dividend pay-out) is constant
  - returns= DY + dividend growth
  - does a low current DY predict low future stock returns?

## Returns and stock size

- Small cap stocks have had higher returns historically, compared to large cap stocks
- Is the “excess” return on small cap stocks due to:
  - higher transactions costs (e.g. higher bid-ask spread)?
  - greater risk?
  - January effect?

# Liquidity of stocks

- Liquidity is the ability to trade in large size at a price close to its “fundamental value” and within a short amount of time
- Dimensions of liquidity:
  - Immediacy: how quickly trades of a given size can be arranged at a given cost. Traders who want immediacy may place market orders
  - Width: the cost of doing a trade a given size. For small trades, width is measured by the bid-ask spread (highest bid - lowest ask price)
  - Depth - the size of a trade at a given cost, measured by the number of shares available at the current bid and ask prices
- Central banks also focus on resiliency (i.e. price reversion after a large non-informational change)

# Key Concepts in Liquidity

- An important function of liquid markets is price discovery
  - Determination of the equilibrium price
  - Important since traders have heterogeneous expectations
- Order flow externality
  - Trading attracts more trading
  - Good stocks may get stuck in a low-trading equilibrium
  - Makes it more difficult for new markets to succeed (e.g. failure of the Optimark trading system in spite of an innovative matching system)

# Liquidity and Regulation

- Regulators should maximize the benefits of liquid markets
  - Should new markets without price discovery be allowed?
- Problem: Different traders value different dimensions of liquidity
  - Impatient traders value immediacy, buy limit order traders may not
  - Small traders want the smallest bid-ask spread, but large traders want greater depth (e.g. decimalization resulted in lower bid-ask spreads but also lower depth)
- Most regulators choose to focus on the welfare of small traders
  - But the welfare of small and large traders may be inter-linked

# Regulatory Structure

- Multiple agencies are generally involved in regulation
- Legislators enact laws that directly regulate markets
  - Enforcement is delegated to various public and private agencies
  - Authorize agencies to write regulations that have the force of law
  - Agencies enforce regulation through judicial proceedings
- Most countries have created government regulatory agencies to oversee traders and trading practices
  - The U.S. agency is the Securities and Exchange Commission (SEC)
  - Some countries delegate regulatory authority to ministries of the government executive branch (e.g. Japan) and national Central Banks (e.g. Ireland and Singapore)

# A Key Regulatory Issue: *Market Fragmentation-1*

- A consolidated market provides the best price overall
- But traders have different needs, and one market cannot satisfy all needs, leading to fragmentation
  - Traders who execute large orders would prefer markets that are *less transparent* so that other traders cannot take advantage of them (e.g. by frontrunning). Small traders like transparent markets.
  - Informed traders prefer consolidated, anonymous markets where other traders would not know that they are informed. Uninformed traders prefer markets where trader identity is exposed.
  - Impatient traders want quick execution while patient traders are price-conscious.
  - Institutional traders prefer markets with *equal access*, rather than markets where access is possible only through its members.

# **Example of a Successful New Market: Liquidnet**

- Liquidnet: an institutional equity broker that runs an anonymous trading system for large sized orders
  - Clients plug the Liquidnet trading system into their electronic order management system
  - If Liquidnet sees that one client wants to buy a security that another wants to sell, it suggests that they negotiate (by indicating this fact on their workstations)
  - The clients contact each other through an anonymous message
  - They negotiate via a Liquidnet messaging window
  - If they agree, they report to Liquidnet who crosses the trade
  - Liquidnet charges 2 cents per share commission
  - Traders are able to limit the number of negotiations (by specifying a minimum order size) and the number of unproductive negotiations (by providing details of previous negotiation history with a trader)
  - No price discovery occurs, as quotes are taken from other markets

## A Key Regulatory Issue: *Market Fragmentation-2*

- Advances in communications and computing technology
  - Facilitate fragmentation through remote trading, automated order management and trade execution, and sophisticated trading strategies
  - But also increase exchange size, by reducing marginal cost (relative to fixed costs) of running an exchange
- *Order flow externality* facilitates consolidation
  - In practice, the incumbent market must be really inefficient or the new market must fill an important niche

# Policy Response to Fragmentation

- Enforce consolidation
  - Stifles free choice and innovation
  - Risk choosing wrong market structure
- Require full information on competing market structures
- Ensure free flow of information between markets
- Ensure that at least some traders can choose where to trade (and so arbitrage return and liquidity differences)
  - Caveat: Brokers may not always seek the best price
- Encourage linkages between trading systems (e.g. via consolidators or private order-management systems)

# Conclusions

- The stock price is the present value of its expected dividends
- Liquidity of stocks also affect their price
- Regulation should seek to maximize the public benefits of liquid markets
- Different investors value different dimensions of liquidity, and this leads to difficult regulatory tradeoffs

## References

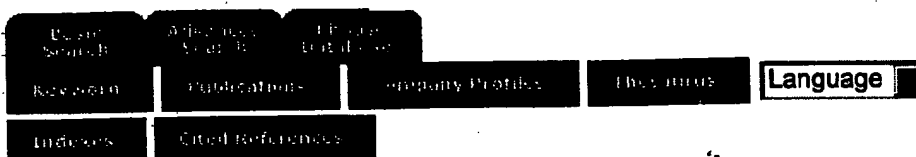
- Larry Harris, *Trading and Exchanges, Market Microstructure for Practitioners*, Oxford University Press 2003.
- Robert A. Schwartz and Reto Francioni, *Equity Markets in Action*, John Wiley and Sons 2004.
- Jeremy J. Siegel, *Stocks for the Long Run*, McGraw-Hill 1998.
- Robert E. Wright, *The Wealth of Nations Rediscovered*, Cambridge University Press 2002.

# ARTICLE 6

## (See attached letter)



Sign In to My EBSCOhost

13 of 47 ▸ [Result List](#) | [Refine Search](#) [Print](#) [E-mail](#) [Save](#) [Add to folder](#) [Folder is empty.](#)Formats: [Citation](#) [HTML Full Text](#)**Title:** DOL says fund use of electronic trading will not violate ERISA.**Authors:** Crawford, Gregory**Source:** [Pensions & Investments](#); 6/14/2004, Vol. 32 Issue 12, p2, 2p, 2c**Document Type:** Article**Subject Terms:** \*[BUSINESS enterprises](#)  
\*[FINANCE](#)  
\*[PENSIONS](#)  
\*[STOCK exchanges](#)  
[ADVISORY opinions](#)**Company/Entity:** [LIQUIDNET Inc.](#)**NAICS/Industry Codes:** [52321 Securities and Commodity Exchanges](#)

**Abstract:** Electronic trading firms are expected to grab a bigger share of trading for ERISA-regulated pension plans, thanks to a Department of Labor advisory opinion that effectively puts them on level footing with stock exchanges. The opinion was handed down in a May 24 letter to William R. Charyk, outside counsel for New York-based *Liquidnet* Inc., by Louis Campagna, head of the DOL's Division of Fiduciary Interpretations. *Liquidnet* had applied for the advisory opinion after a large corporate pension fund, which officials declined to name, raised concerns about joining *Liquidnet* because of ERISA restricts a plan interacting with another "party of interest" of the plan, typically a fiduciary or someone providing services to the plan.

**Full Text Word Count:** 1034**ISSN:** 1050-4974**Accession Number:** 13518493**Persistent link to this record:** <http://search.epnet.com/login.aspx?direct=true&db=buh&an=13518493>**Database:** Business Source Premier[Choose Language](#)

\* \* \*

**PLAYING FIELD LEVELED****DOL says fund use of electronic trading will not violate ERISA**

**Contents**

'Anonymous negotiations'

Another option

More needed from DOL

Electronic trading firms are expected to grab a bigger share of trading for ERISA-regulated pension plans, thanks to a Department of Labor advisory opinion that effectively puts them on level footing with stock exchanges.

The opinion was handed down in a May 24 letter to William R. Charyk, outside counsel for New York-based **Liquidnet** Inc., by Louis Campagna, head of the DOL's Division of Fiduciary Interpretations.

**Liquidnet** had applied for the advisory opinion after a large corporate pension fund, which officials declined to name, raised concerns about joining **Liquidnet** because of ERISA restricts a plan interacting with another "party of interest" of the plan, typically a fiduciary or someone providing services to the plan.

The opinion said the firm can handle trades for ERISA pension plans or their fiduciaries without running afoul of the pension law.

### **'Anonymous negotiations'**

"In our view, transactions executed through **Liquidnet's** trading procedures for the execution of transactions that are designed to permit anonymous negotiations without identifying the parties, function in a manner similar to the operation of an exchange," Mr. Campagna wrote. "Accordingly, based on your representations, it is our further view that 'blind' transactions executed pursuant to such procedures would not, in themselves, constitute prohibited transactions" under the Employee Retirement Income Security Act.

A blind transaction is one in which the buyer and seller are anonymous.

Alfred Eskandar, **Liquidnet's** director of marketing, said the DOL advisory opinion "gives a green light" to any pension fund to use an electronic trading system.

The opinion confirmed Liquidnet's position that because the firm's trading system is anonymous, plan sponsors — and managers trading on their behalf as fiduciaries — do not have to worry about whether the counterparty might be another plan fiduciary, said Howard Meyerson, general counsel for **Liquidnet**.

"We think now we can go out to more pension funds more aggressively," Mr. Meyerson added.

Andrew Oringer, a partner at the law firm Clifford Chance US LLP, New York, who leads the firm's ERISA practice, said the opinion, while specific to **Liquidnet**, has broader trading industry applications.

"It helps to remove a hurdle to the establishment of ECNs (electronic communications networks) and other kinds of trading networks," he said. "A lot of institutional money is from pension plans, and the opinion really facilitates the ability of these ECNs and trading networks to operate."

In fact, Michael Plunkett, president, North America, for Instinet LLC, the institutional trading unit of electronic brokerage firm Instinet Group Inc., New York, said that while the number of plan sponsors that run their own money internally remains small, the **Liquidnet** opinion is significant for his firm.

"We will probably get a little more aggressive in that space now, knowing that some peoples' eyes and ears have been opened" by virtue of the **Liquidnet** opinion, he said. "I don't think it's a huge opportunity now, but it's something we're interested in."

### **Another option**

Larty Tabb, founder and chief executive officer of Boston-based Tabb Group, a financial services consulting firm, agreed the opinion gives pension funds another trading option.

"Clearly, with pension funds being able to trade more over (electronic) platforms, that expands their capabilities," he said. "Typically, executions done on crossing networks are probably some of the best executions."

Most ERISA-governed funds were probably watching the outcome of the **Liquidnet** case, Seth Merrin, co-founder and chief executive officer of **Liquidnet**, said. "The fact that the DOL has ruled on this in our favor has got to overcome concerns or draw attention to the fact that there are other plan sponsors who can now be (**Liquidnet**) participants."

Mr. Meyerson said **Liquidnet** officials had told the potential client that because trading is anonymous, "a plan could trade with a fiduciary without knowing about it," he explained. "But they wanted to strictly comply."

Another large pension fund, which he also declined to name, raised the issue but agreed with the firm's position that the restriction should not apply, Mr. Meyerson added.

Mr. Merrin said the issue is being driven by plan sponsors' increased focus on transaction costs and their desire to keep those costs as low as possible.

"The plan sponsors are the ones that have been most aware of these transaction costs, and it started with the scrutiny on their managers — taking a look at commissions and how they monitor transaction costs," he explained. "We know they have been talking among themselves to come up with a mechanism to cross trades themselves without going to the market."

He pointed out that **Liquidnet** provides that mechanism.

### More needed from DOL

While the **Liquidnet** advisory opinion bodes well for ERISA plans as well as electronic trading networks, some industry watchers said the Labor Department has more work to do to provide additional relief for plans seeking greater flexibility in trading.

"The department really recognizes the flexible use of ECNs is an essential tool for managers to get best execution and I think this is a very good start," said A. Richard "Brick" Susko, partner in the New York law firm of Cleary, Gottlieb, Steen & Hamilton. "But it's not the end of the story."

He said the DOL was reviewing other applications for exemptions. Those exemptions include allowing ERISA plans to use an ECN even if it is owned by several broker/dealers and service providers and allowing affiliated advisers of broker/dealers to use the ECNs that they own.

In addition, he said the DOL should allow trades to take place "mechanically" over electronic trading systems even if the names of buyer and seller are known.

"If it's mechanical and you're getting the best execution, it shouldn't matter" whether names are posted, he argued. "I think more disclosure is better than less disclosure. What you really want is a marketplace that's open and transparent."

He said a competitive marketplace in which anyone can match any bid or offer is the best protection for plans.

PHOTO (COLOR): **Liquidnet's** Alfred Eskandar called the opinion 'a green light' for pension funds wanting to use electronic trading.

PHOTO (COLOR): ERISA lawyer Andrew Oringer said the DOL opinion has implications for the industry beyond **Liquidnet**.

~~~~~

By Gregory Crawford

Copyright of **Pensions & Investments** is the property of Crain Communications Inc. (MI) and its content may not be copied or e-mailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or e-mail articles for individual use.  
**Source:** Pensions & Investments, 6/14/2004, Vol. 32 Issue 12, p2, 2p  
**Item:** 13518493

[Top of Page](#)

---

Formats:  [Citation](#)  [HTML Full Text](#)

◀ 13 of 47 ▶ [Result List](#) | [Refine Search](#)  [Print](#)  [E-mail](#)

 [Save](#)  [Add to folder](#)

 [Folder is empty.](#)

© 2005 EBSCO Publishing. [Privacy Policy](#) - [Terms of Use](#)



# U.S. Department of Labor

## Employee Benefits Security Administration

[www.dol.gov/ebsa](http://www.dol.gov/ebsa)



[Go](#) [Search / A-Z Index](#)

Find It!: [By Topic](#) | [By Audience](#) | [By Top 20 Requested Items](#) | [By Form](#) | [By Organization](#) | [By Location](#)

June 28, 2005 [DOL](#) > [EBSA](#) > [Laws & Regulations](#) > [Advisory Opinion](#)

### Advisory Opinion

May 24, 2004

Mr. William R. Charyk  
Arent Fox Kintner Plotkin & Kahn, PLLC  
1050 Connecticut Avenue, NW  
Washington, DC 20036-5339

2004-05A  
ERISA Sec. 406(a)(1)(A),(D)  
406(b)(1),(2)

Dear Mr. Charyk:

This is in response to your request for guidance under section 406 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 4975 of the Internal Revenue Code of 1986, as amended (the Code).<sup>(1)</sup> In particular, you ask whether the execution of a securities transaction between a plan and a party in interest with respect to such plan as defined in ERISA through an alternative trading system (ATS) maintained by Liquidnet, Inc. (Liquidnet) constitutes a prohibited transaction under section 406(a)(1)(A) and (D) of ERISA. In addition, you inquire whether the execution of a securities transaction through the Liquidnet ATS (the Liquidnet System) between a plan and a counterparty that is an affiliate of the fiduciary directing such trade on behalf of the plan also violates section 406(b) of ERISA.

You write on behalf of Liquidnet, a registered broker/dealer that maintains the Liquidnet System. The Liquidnet System is an "alternative trading system," as defined in Rule 300(a) of Regulation ATS under the Securities Exchange Act of 1934, as amended. You also represent that all of Liquidnet's approximately 200 subscribers are large institutional investors that individually manage, on average, approximately \$31 billion of equity assets. You note that these subscribers, none of which are affiliated with Liquidnet, often act as named fiduciaries, investment managers, or provide other services to employee benefit plans.

You state that Liquidnet was created to facilitate the trading of "blocks" of equity securities. In this regard, since its inception in 2001, more than three billion shares of equity securities have been traded over the Liquidnet System pursuant to trade sizes that have averaged approximately 44,000 shares. You state that the total value of the shares traded through the Liquidnet System approximated \$61 billion as of August 29, 2003.

You state that subscribers to Liquidnet may trade U.S., U.K., French, German, Netherlands, and Swiss equity securities through the Liquidnet System. In this regard, you state that the Liquidnet System: (1) interfaces with the order management systems of Liquidnet's subscribers; and (2) identifies, with respect to a particular security, each Liquidnet subscriber that has an interest in buying the security and each Liquidnet subscriber that contemporaneously has an interest in selling the security. You state that each Liquidnet subscriber indicates to the Liquidnet System its interest in buying or selling various securities. If one subscriber indicates to the Liquidnet System an interest in buying a certain security that a different subscriber has independently indicated to the Liquidnet System an interest in selling, the Liquidnet System notifies both subscribers that a transaction opportunity exists.<sup>(2)</sup> You note that the Liquidnet System does not disclose the identity of either subscriber to the other. The two subscribers may then negotiate, through their respective computer systems; both the price and the quantity of the security. Accordingly, you state that the Liquidnet System enables subscribers to engage in an anonymous, no obligation, one-on-one, real-time negotiation (a subscriber must terminate its current negotiation with another subscriber before engaging in a new negotiation with a different subscriber).

You state that multiple Liquidnet subscribers may have an interest in buying (or selling) a security that a different Liquidnet subscriber has an interest in selling (or buying). Where, for example, the Liquidnet System identifies that multiple subscribers have an interest in buying a security that a different subscriber has an interest in selling, the Liquidnet System

[About EBSA](#)

[Laws & Regulations](#)

[Proposed Rules](#)

[Final Rules](#)

[Compliance  
Assistance](#)

[For Small  
Employers](#)

[For Health Plans](#)

[For Retirement  
Plans](#)

[Reporting & Filing](#)

[Fiduciary  
Education](#)

[Exemptions](#)

[Interpretations](#)

[ERISA Enforcement](#)

[Newsroom](#)

[Speeches &  
Testimony](#)

[Fact Sheets](#)

[Consumer  
Information](#)

[Health Plans](#)

[Pension Plans](#)

[Consumer  
Complaints](#)

[Frequently Asked  
Questions](#)

[Publications/Reports](#)

[Forms/Doc Requests](#)

[Programs/Initiatives](#)

[Related Resources](#)

[Contact Us](#)

provides the selling subscriber with an electronic listing of the anonymous subscribers interested in buying. You note that once a subscriber is provided with such a listing, the subscriber may thereafter negotiate with any or all of the subscribers on the list. You state that the Liquidnet System currently determines the order of a multiple subscriber listing by comparing the quantities they have posted to the quantity posted by the single contra-side subscriber. The subscriber posting a quantity that is nearest to the quantity posted by the single contra-side subscriber is placed first on the list. The remaining order is determined in the same fashion.<sup>(3)</sup> You state that the Liquidnet System's trading rules, which are distributed to all subscribers, contains a disclosure that describes how multiple potential negotiating subscribers will be ordered.

You represent that trades entered into pursuant to the Liquidnet System are executed on a "blind" basis. In this regard, you state that, during the entire execution and settlement processes, subscribers interact with each other pursuant to policies and rules designed to ensure anonymity. You represent that the Liquidnet System, never discloses the identity of a subscriber to any other. In addition, all physical transfers of equity securities and cash are made between an independent clearing firm, Bear, Stearns Securities Corp. and the buyer's and seller's respective custodians. Therefore, the identities of the parties to a trade will not be revealed to the parties during the clearing process.

You state that: given the number and type of Liquidnet subscribers; the large number of trades executed on Liquidnet on a daily basis; and the fact that such trades are executed and settled pursuant to rules, procedures and software designed to ensure anonymity; it is expected that the parties to a transaction engaged in through the Liquidnet System will not know, at any time, the identity of each other.<sup>(4)</sup> Accordingly, it is possible for a subscriber, in its capacity as a fiduciary with respect to a plan, to unknowingly buy/sell a security on behalf of the plan through the Liquidnet System from/to a Liquidnet subscriber that is a party in interest to the plan.

Further, you note that although a subscriber cannot execute a securities transaction with itself through the Liquidnet System (i.e., as both the buyer and seller), it is possible for a plan fiduciary to direct a trade through the Liquidnet System whereby the Liquidnet subscriber that is the counterparty to the plan is an affiliate of such fiduciary. You state that two affiliates may request that Liquidnet "block" negotiations between the two entities. However, you note that a Liquidnet subscriber may not be aware that an affiliate thereof is also a Liquidnet subscriber.

Section 3(14)(A) and (B) of ERISA defines the term "party in interest" as meaning, as to an employee benefit plan, any fiduciary (including, among others, a trustee) of an employee benefit plan; and a person providing services to such plan. ERISA section 3(21)(A) provides that a person is a fiduciary with respect to a plan to the extent that (i) he exercises any discretionary authority or discretionary control respecting management of such plan or exercises any authority or control respecting management or disposition of its assets, (ii) he renders investment advice for a fee or other compensation, direct or indirect, with respect to any moneys or other property of the plan, or has any authority or responsibility to do so, or (iii) he has any discretionary authority or responsibility in the administration of such plan.

Section 406(a)(1)(A) of ERISA prohibits a fiduciary with respect to a plan from causing the plan to engage in a transaction if he or she knows or should know that the transaction constitutes a direct or indirect sale or exchange, or leasing, of any property between the plan and a party in interest. Section 406(a)(1)(D) of ERISA provides that a fiduciary with respect to a plan shall not cause the plan to engage in a transaction, if he or she knows or should know that such transaction constitutes a direct or indirect transfer to, or use by or for the benefit of, a party in interest, of any assets of the plan. Section 406(b)(1) of ERISA provides that a fiduciary with respect to a plan shall not deal with the assets of the plan in his or her own interest or for his or her own account. Section 406(b)(2) provides that a fiduciary with respect to a plan shall not in his or her individual or in any other capacity act in any transaction involving the plan on behalf of a party (or represent a party) whose interests are adverse to the interests of the plan or the interests of its participants or beneficiaries.

With respect to purchases and sales of equity securities, we note that the Conference Report accompanying ERISA states that:

In general, it is expected that a transaction will not be a prohibited transaction (under either the labor or tax provisions) if the transaction is an ordinary "blind" purchase or sale of securities through an exchange where neither

buyer nor seller (nor the agent of either) knows the identity of the other party involved. In this case, there is no reason to impose a sanction on a fiduciary (or party-in-interest) merely because, by chance, the other party turns out to be a party-in-interest (or plan). H.R. Rep. 93-1280, 93rd Cong., 2d Sess., 307 (1974).

As you noted, Liquidnet matches purchase and sell orders from its clients and gives purchasers and sellers the opportunity to negotiate a trade based on price and volume. The number of subscribers and the trading procedures assure a party's anonymity, unless the party wishes to identify itself to the counter-party. In our view, transactions executed through Liquidnet's trading procedures for the execution of transactions, that are designed to permit anonymous negotiations without identifying the parties, function in a manner similar to the operation of an exchange. Accordingly, based on your representations, it is our further view that "blind" transactions executed pursuant to such procedures would not, in themselves, constitute prohibited transactions under section 406(a)(1)(A), 406(a)(1)(D), 406(b)(1) or 406(b)(2) of ERISA.

The Department notes, however, that a transaction effectuated through the Liquidnet System will not be considered "blind" if, prior to the execution of such transaction, the plan fiduciary responsible for the plan's engagement in the transaction knew, or had reason to know, the identity of the counterparty to such transaction. Given the ability of parties to a transaction to disclose their identities to each other, persons trading on behalf of employee benefit plans should be particularly careful to make sure the transaction is truly blind. Moreover, these determinations assume that such purchase and sale transactions did not arise in connection with any arrangement, agreement, or understanding designed to benefit the fiduciary (including an affiliate thereof) or any other party in interest to the plan.

In addition, with respect to the arrangement and transactions described above, ERISA's general standards of fiduciary conduct apply to: (i) the determination to buy or sell a particular equity security (and, in addition, the determination as to the appropriate purchase or sale price for such security); and (ii) the determination as to which trading system should be used to assist with the purchase or sale of equity securities.<sup>(5)</sup> In this regard, as noted above, section 404 of ERISA requires a fiduciary to discharge his duties respecting a plan solely in the interest of the plan's participants and beneficiaries. This section also requires that a plan fiduciary act prudently and for the exclusive purpose of: providing benefits to plan participants and their beneficiaries; and defraying reasonable expenses of administering the plan. Accordingly, plan fiduciaries that subscribe to Liquidnet must consider the costs associated with the use of alternative trading systems as well as the potential revenue returns, discounts, and other benefits that result from the continuing use of particular alternative trading systems over other similar services.

Further, prior to a plan fiduciary's decision to execute a securities transaction through Liquidnet, the plan fiduciary (as a subscriber or an affiliate of a subscriber) should determine whether any existing or potential conflicts of interest or prohibited transactions under ERISA would interfere with the proper exercise of any of the fiduciary's responsibilities under section 404 of ERISA, including the duty to act solely on behalf of the plan.

This letter constitutes an advisory opinion under ERISA Procedure 76-1 (41 Fed. Reg. 36281, August 27, 1976). Accordingly, this letter is issued subject to the provisions of the procedure, including section 10 relating to the effect of advisory opinions. The opinion only relates to the specific issues raised by your request. For example, you have not asked and the Department is expressing no opinion with respect to the fees and other compensation received by persons engaging in transactions on the Liquidnet System on behalf of plans.

Sincerely,  
Louis Campagna  
Chief, Division of Fiduciary Interpretations  
Office of Regulations and Interpretations

---

#### Footnotes

1. Under Reorganization Plan No. 4 of 1978, 43 FR 47713 (5 U.S.C. App. 1 [1996]), the authority of the Secretary of the Treasury to issue rulings

under section 4975 of the Code has been transferred, with certain exceptions not here relevant, to the Secretary of Labor. The Secretary of the Treasury is bound by interpretations of the Secretary of Labor pursuant to such authority. Therefore, references in this letter to specific sections of ERISA should be read to refer also to the corresponding sections of the Code.

2. Accordingly, you state that Liquidnet does not "solicit" subscriber interest with respect to the buying or selling of securities (i.e., once a subscriber notifies Liquidnet that it has an interest in buying or selling a security, the Liquidnet System does not thereafter broadcast that interest to all of the other Liquidnet subscribers).
3. You state that in the future, the percentage of successful negotiations attributable to each respective subscriber may also affect the ordering of a multiple subscriber list.
4. You note, however, that subscribers using the system to negotiate a securities transaction may "chat" with each other. In this regard, you state that although the Liquidnet System does not disclose the identities of negotiating subscribers to each other, two such subscribers may electronically correspond to each other, without restriction as to content, through the Liquidnet System as part of the negotiation. You note that this type of correspondence is reviewed and retained by Liquidnet.
5. Whether, in light of all the facts and circumstances, a purchase or sale of securities or the use of a particular service provider satisfies the fiduciary responsibility provisions of ERISA is an inherently factual question as to which the Department generally will not opine. See section 5.01 of ERISA Procedure 76-1, 41 Fed. Reg. 36281 (Aug. 27, 1976).

 [Back to Top](#)

[www.dol.gov/ebsa](http://www.dol.gov/ebsa)

[www.dol.gov](http://www.dol.gov)

---

[Frequently Asked Questions](#) | [Freedom of Information Act](#) | [Customer Survey](#)  
[Privacy & Security Statement](#) | [Disclaimers](#) | [E-mail to a Friend](#)

---

**U.S. Department of Labor**  
Frances Perkins Building  
200 Constitution Avenue, NW  
Washington, DC 20210

**1.866.444.3272**  
TTY: **1.877.889.5627**  
[Contact Us](#)



21/06/05 [BST] 16:45

[Home](#)
[News](#) | [Week in view](#) | [Company announcements](#) | [Careers](#) |

 Get the Finextra headlines emailed to you | [Register now!](#) | [Log in](#) | [Help](#)

**Market intelligence**
[Retail banking](#)  
[Wholesale banking](#)  
[Cards](#)  
[Dealing rooms](#)  
[ECNs & exchanges](#)  
[Online banking](#)  
[Payments](#)  
[Risk](#)  
[Security](#)  
[STP](#)
**Research tools**
[Advanced search](#)  
[Analysis](#)  
[Research](#)  
[Comment](#)  
[Case studies](#)  
[White papers](#)
**Directories**
[Solutions sourcing](#)  
[Industry directory](#)
**About Finextra**
[About us](#)  
[DataBank](#)  
[Newsfeed](#)  
[RSS](#)
[XML](#)
 Finextra DataBank  
 Hand-pick your  
 prospects

Real Time Information System

Wednesday 22 June 2005 London Stock Exchange

CABLE &amp; WIRELESS

**Company announcement**

Source: Liquidnet

**Liquidnet reports Q1 2005 results**
 Published:  
 29 April 2005

Liquidnet, the #1 electronic marketplace for block trading, announced its first quarter 2005 results today.

During the quarter, Liquidnet extended its dominance in block(1) volume in names it traded across all capitalizations. Liquidnet Member firms traded 100 percent of the block volume for the day in nearly one out of every six names they executed through Liquidnet during the quarter. Additionally, Liquidnet Members represented 1 percent of the block volume in small cap names 30 percent of the time. In the first quarter, Liquidnet accounted for 58 percent of the block volume for the day on average for small-cap names its Members executed and 41 percent of the block volume for the day on average for every name its Members executed.

"Liquidnet has emerged as the only trading venue to go to if you want to get size done while maintaining anonymity without moving the market," said Seth Merrin, CEO of Liquidnet. "As Liquidnet's volume increases, our Members are executing a growing percentage of the total block volume in the markets. The Liquidnet community is continuing to benefit from the network effect where each new Member adds to the liquidity and the opportunities available to all other Members."

For the first quarter, Liquidnet's average daily volume for U.S. equity trades hit a record 27.5 million shares, a 20 percent increase over the last quarter and a 60 percent increase from the first quarter a year ago. Earlier this month, Liquidnet climbed the ranks as one of the largest institutional brokers in the country. In its most recent analysis, Plexus Group ranked Liquidnet as the 11th largest institutional broker for NASDAQ trades and the 13th largest institutional broker for NYSE trades. Previously, Liquidnet had been ranked as the 15th and 14th largest broker, respectively. The ranking is based on total principal traded for four consecutive quarters and includes a universe of more than 1,500 brokers.

Liquidnet Europe's Principal Traded Rises Almost 60 Percent Over the Last Quarter Liquidnet Europe's principal traded surged to 1.6 billion pounds - a 59.7 percent increase over the fourth quarter of 2004 and a 130 percent increase over the first quarter of last year. Average bargain value per trade for Liquidnet Europe in the first

quarter of 2005 was 720,532 pounds - a 20.7 percent increase from the fourth quarter of 2004 and a 46 percent increase over the same quarter one year ago. In less than three months since joining the London Stock Exchange, Liquidnet Europe, in operation only two and a half years, is now ranked as the 26th largest agency brokerage firm out of approximately 200 for U.K. equity trades according to the LSE.

[Tell a colleague](#)[Receive free headlines](#)[Printer friendly](#)[Home](#) | [Latest company announcements](#)

Editorial: [news@finextra.com](mailto:news@finextra.com) Sales and member queries: [contact@finextra.com](mailto:contact@finextra.com) © Finextra Research 2005

Research  
Databases

Sign In to My EBSCOhost

[New Search](#) | [View Folder](#) | [Preferences](#) | [Help](#)

Basic Search	Advanced Search	Company Profiles	Thesaurus	Language
Keyword	Publication	Company Profiles	Thesaurus	Language
Index	Cited References			

11 of 47 [Result List](#) | [Refine Search](#) [Print](#) [E-mail](#) [Save](#) [Add to folder](#) [Folder is empty.](#)Formats: [Citation](#) [PDF Full Text](#) (471K)**Title:** [Fair Access and Block Trading. \(cover story\)](#)**Authors:** [Clary, Isabelle](#)**Source:** [Securities Industry News; 8/23/2004, Vol. 16 Issue 28, p1, 2p, 1c](#)**Document Type:** [Article](#)**Subject Terms:** [\\*BLOCK trading](#)  
[\\*INSTITUTIONAL investments](#)  
[NASDAQ Stock Market](#)  
[NEW York Stock Exchange](#)  
[UNITED States. -- Securities & Exchange Commission](#)  
[ELECTRONIC trading of securities](#)  
[INSTITUTIONAL investors](#)**Geographic Terms:** [UNITED States](#)**Company/Entity:** [LIQUIDNET Inc.](#)**People:** [MERRIN, Seth](#)**Abstract:** Reports on the Regulation National Market System proposal by the U.S. Securities and Exchange Commission that could change electronic block-trading and affect some large institutional investors in 2004. Statement issued by electronic block trader *Liquidnet* CEO Seth Merrin regarding the proposal; Average size of orders in institutional clients' order management system executed on *Liquidnet*; Rank of *Liquidnet* for New York Stock Exchange stocks and Nasdaq stocks.**ISSN:** 1089-6333**Accession Number:** 14234953**Persistent link to this record:** <http://search.epnet.com/login.aspx?direct=true&db=buh&an=14234953>**Database:** Business Source PremierFormats: [Citation](#) [PDF Full Text](#) (471K)

# Securities Industry News

August 23, 2004

What Makes Markets

www.securitiesindustry.com

## Trading Scandal Grows

Data from Lipper show market timing in variable annuities may dwarf mutual fund scandal

By CAROL E. CURTIS  
Correspondent

Already under attack for questionable fees and sales practices, variable annuities are about to get another jolt of unwelcome attention. In mid-August, when the Securities and Exchange Commission and New York Attorney General Eliot Spitzer announced the first settlement in a case involving market timing of variable annuities, Spitzer addressed the issue of whether

this was just the beginning. "I'm not sure if it's the tip of the iceberg," he was quoted as saying. "But there's more than one ice cube in this ocean."

That may be a classic understatement. *Securities Industry News* has obtained data indicating that market timing within variable annuities is at least as widespread as it is in mutual funds, and that individual investors could be harder hit by variable annuity abuses than they have

Continued on page 12

New York Attorney General Eliot Spitzer expects to find more culprits in the market timing abuses involving variable annuities



## Fair Access and Block Trading

By ISABELLE CLARY  
Markets Editor

With so much interest devoted to the trade-through debate, market participants have paid little attention to one Regulation NMS proposal that could change electronic block-trading and affect some large institutional investors.

The Securities and Exchange Commission is proposing to lower the fair access threshold in Reg ATS from 20 percent to 5 percent. Under the 1998 regulation governing alternative trading venues, a marketplace that handles more than 20 per-

cent of the volume in any stock must provide full access and display all its orders.

Lowering that threshold could force successful electronic block-crossing brokers to radically change their model from members-only to ECN-like venues. Institutional investors could lose the benefits of quietly trading blocks without direct market impact.

Unlike proposed reforms about sub-penny trading or locked and crossed markets that address industry concern, the fair threshold issue seems to solely stem from the desire for uni-

Continued on page 13

### INSIDE

#### NEWS

Bermuda Muils Hedge Fund Regulations ..... Page 5

Bank Secrecy Act Filings to Go Electronic ..... Page 12

SEC Transfer Agency Plan Sits Debate ..... Page 14

#### COMMENT

Santayana, Gandalf, and the SEC's Five-Year Plan ..... Page 6

#### BEHIND THE NEWS

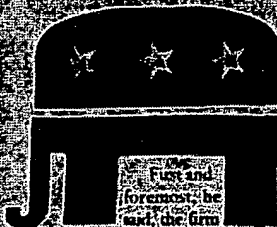
Producing Order Flow in the Eye of the Storm ..... Page 6

## BCP Execs Ready for Gridlock

By SHARON KITE  
Correspondent

Congression and commuting difficulties wrought by the arrival of the Republican National Convention later this month, and associated potential disruptions from protestors and "snatchers" rank ahead of potential terror strikes on the list of worries of community managers at some of Wall Street's major broker-dealers.

This is according to several New York City-based financial institutions, which said they are bracing for what one contingency executive called the logistical "nightmare" that the RNC poses. Morgan Stanley, for one, is assuming heavy commuting difficulties during the RNC and thus is working out contingencies to address those and associated issues according to a business continuity planning (BCP) executive with knowledge of the firm's plans but who wished to remain anonymous.



is hardening its security posture both as a deterrent for potential mischief and to reassure employees about the level of safety in the workplace. The broker is also looking at what it can do to enhance its operational diversity at all levels in terms of staff, technology and work locations. Morgan Stanley operates in a split operations model with a second major office located in Westchester County, north of Manhattan, so employees can work offsite or outside of headquarters.

Continued on page 14

To subscribe, call (800) 607-1967

## COVER STORY

## ▶ MARKET STRUCTURE

## Block Trading at Issue — Continued from page 11

form rules, regardless of the different needs of retail and wholesale participants.

"It would be neither fair nor realistic to require a block desk trader, who is negotiating an order between two institutional customers to publicly display the institutions' bids and offers for everyone to see," said Liquidnet CEO Seth Merrin, who wrote to regulators and recently met with the SEC staff to discuss the proposal.

"To impose a fair access requirement on Liquidnet but not on block trading desks puts Liquidnet at an unfair competitive disadvantage," Merrin added. He pointed out the fair access provision was meant to apply to markets where orders are displayed to multiple members, like in an ECN book, but not to venues like Liquidnet that do not display any quote.

"Liquidnet does not publish quotes," said Merrin, who emphasized that Liquidnet is no different from bulge bracket firms' block trading desks that would be exempt from the fair access rule—except for the fact that his market is fully automated. "We are electronic. If I were to put a trader in the middle, we would be exempt."

## One-On-One Negotiations

Liquidnet, which made its debut in April 2001, quickly became a major player in the block trading space on the strength of its electronic model.

"Its platform is directly connected to the order management systems of its 274 clients. When a customer enters an order in his OMS, Liquidnet's system searches for a possible match and informs the two

sides about the potential for a transaction. The two parties negotiate the deal over the electronic system without any human intermediary, eliminating the risk of leakage, which happens when block traders call around to find a taker.

"As an electronic block trader, we believe that Liquidnet should be exempt from the fair access provisions, like all other block traders. The regulations should not favor one model of block trading at the expense

**"It would be neither fair nor realistic to require a block desk trader who is negotiating an order between two institutional customers to publicly display the institutions' bids and offers for everyone to see."**

— Seth Merrin, Liquidnet

of another model," Merrin reiterated.

"About one-fourth of all orders in institutional clients' OMS get matched in Liquidnet, and 92 percent of the trades

are within the national best bid/offer (NBBO). The average size of orders executed on Liquidnet is 43,000-plus shares, 110 times the average size of orders on ECNs, and 90 times the average execution size on the New York Stock Exchange, where orders are smaller than 10,000 shares 98 percent of the time.

Another way to work blocks is to "slice and dice" blocks in small pieces that electronic brokers' smart-routers spray over multiple destinations. But Liquidnet points out it is time-consuming to exhaust a large block sliced into bits and that smart-routing technology can also result in leakage by spotting the venue with sustained supply or demand for a given stock.

"You don't need Liquidnet to access other markets," said Merrin, who noted this is another reason why the fair access issue should not apply to his venue. Due to the volume they handle, institutional players have set up their own access to all the venues they need to reach.

Liquidnet is not cheap and charges 2 cents a share, while most ECNs charge 0.3 cent a share. Yet, the block-crossing broker explains its popularity among the big institutional investors by the fact it provides price improvement opportunity. On average, Liquidnet says block trades on its system result in a 1.6-cent price improvement per share, following one-on-one negotiation between the customers; for an overall transaction cost of 0.4 cent a share.

Liquidnet is ranked number 15 for NYSE stocks and number 20 for Nasdaq stocks in the Plexus Group's ranking of institutional brokers. The block-crossing broker has expanded its presence in five

European markets, just added Canada and received approval to trade French stocks.

## Another Reason for Opt-Out

An important concern for regulators is the law of unintended consequences, well evidenced by the order handling rules and the ECNs' unexpected impact on the Nasdaq marketplace.

One unintended consequence could be the emergence of regulatory arbitrage despite similar rules because of the diversity of market participants. In no area is this concern greater than with the trade-through or "best price" rule.

For the sake of applying the trade-through rule to all, Reg NMS wants to define an "order execution facility" as any trading entity, from "all national securities exchanges... [to] any other broker or dealer that executes orders internally by trading as principal or crossing orders as agent."

On venues like Liquidnet, trading results from negotiation among participants who may be looking at the best price when they initiate the process but be in trade-through violation by the time the deal is sealed.

Liquidnet, which operates in Britain, has raised such concern with the London Stock Exchange (LSE), which has its own trade-through restrictions.

"The point of execution is when the Liquidnet price has been accepted by both parties. Given that the execution can only be at most 40 seconds later than when the price was originally prepared in accordance with the aforementioned rules, we are satisfied that this would not be considered a breach," the LSE wrote to Liquidnet in approving the exemption.

The SEC is well aware of this difficulty, which could be solved by one of two proposed exemptions in Reg NMS: the opt-out would permit institutional investors to let their brokers decide what constitutes best execution. "An exception for block trades may not be necessary because its proposed (opt-out) exception to the trade-through rule... would be available to a customer or broker-dealer that wishes to execute a block trade," the SEC said when asking the industry's input on the issue.

However, the NYSE has been so far successful in opposing opt-out, the fate of which is unclear. In the absence of opt-out, a block trade exemption would be needed, adding to a list of other exceptions for basket and program trading.

"The Commission also requests comment on whether a block exemption would be necessary if the proposed opt-out exception is not adopted," the SEC also asked. But some in the industry have already questioned what is the use of a hard rule that requires so many exceptions. ■

CEN. Money service businesses (MSBs) are now defined as financial institutions under the USA Patriot Act and are subject to its requirements. A new SAR was made available specifically for MSBs in November 2002.

In addition to the installation of a robust data warehouse, FinCEN expects to do away with the cumbersome front end currently used to electronically file BSA reports; that current system takes filings from a Web portal—the Patriot Act Communication System (PACS)—and feeds them to an IRS legacy system, the Currency Bank Retrieval System, or the CBRS, significantly slowing down the process. "Right now the sign-on leads from the Web portal to another sign-on, which is character and maintenance-based and requires another password," the FinCEN official said. "You're really entering the front door of the Internal Revenue Services' CBRS. In other words, for you to be a user of this system, you have to be willing to jump through these hoops on a regular

basis." BSA Direct will obviate the need for the IRS's front-end system. "We expect BSA Direct to exceed the functionality provided by CBRS, so it would not be needed by users of BSA Direct," said FinCEN's James.

"PACS is the system that financial institutions use to file electronically, although the various reporting forms are being phased in incrementally," said Breffni McGuire, a banking analyst with the TowerGroup. "PACS is really designed for institutions with larger volumes of SARs and CTRs, although there's nothing to stop smaller volume firms from using it. I would expect the volume of e-filing to increase as more institutions come on board." Smaller firms, which are less transparent and may have fewer resources to automate, could be more vulnerable to money laundering now and in the future.

FinCEN's James acknowledged that, "Some financial institutions still file CTRs and other reports on paper and those are manually entered into the system. Others file their

reports via magnetic tape and diskette. We are working to encourage financial institutions to explore the PACS method as it eliminates the need for paper, and allows us to get the reports into the system as quickly as possible."

FinCEN is also hoping the Web-based functionality in BSA Direct will reduce bulk downloads. "We have agreements with a few agencies like the FBI that really need this form of data delivery," the FinCEN official said. "The FBI takes bulk downloads (of BSA filings) that they can integrate with their own repository of information. They then can manipulate our data with their own. The missing piece we provide in a surveillance operation might be important to an investigation." FinCEN did not identify other Federal agencies beside the FBI that may be users.

FinCEN hopes to have 2,000 registered users by this October, which is roughly the current number of users for CBRS. EDS will also help develop standardized training, which may lead to a BSA Direct users group. ■

Research  
Databases

Sign In to My EBSCOhost

[New Search](#) | [View Folder](#) | [Preferences](#) | [Help](#)

Basic Search	Advanced Search	Company Profiles	The Campus	Language
Keyword	Publications	Company Profiles	The Campus	Language
Indexes	Cited References			

41 of 47 ▸ [Result List](#) | [Refine Search](#) | [Print](#) | [E-mail](#)[Save](#) | [Add to folder](#)[Folder is empty.](#)Formats: [Citation](#) | [HTML Full Text](#)**Title:** *Liquidnet* to offer direct trading.**Authors:** Kennedy, Mike**Source:** Pensions & Investments; 12/11/2000, Vol. 28 Issue 25, p2, 2p, 2c**Document Type:** Article**Subject Terms:** \*STOCKS**Company/Entity:** LIQUIDNET Inc.**NAICS/Industry Codes:** 52321 Securities and Commodity Exchanges**Abstract:** Reports that *Liquidnet* will offer the first alternative direct trading platform for large institutional investors. Trading of large blocks of domestic equities and American depository receipts. Details of the platform.

ISSN: 1050-4974

**Accession Number:** 3926166**Persistent link to this record:** <http://search.epnet.com/login.aspx?direct=true&db=buh&an=3926166>**Database:** Business Source Premier[Choose Language](#)

\* \* \*

**LIQUIDNET TO OFFER DIRECT TRADING****Contents**[Anonymous liquidity](#)[OptiMark comparison](#)**New platform will be first granting large institutions anonymity in U.S. stock, ADR trades with each other****NEW YORK - *Liquidnet*** soon will offer the first alternative direct trading platform for large institutional investors to trade large blocks of domestic equities and American depository receipts with each other in an exclusive and anonymous format.

The firm, formed in January, will go live with its new platform in the first quarter of 2001. It is the idea of Seth Merrin, chief executive officer, who said it had been clear for some time that such a system—which, unlike an electronic communication network or cross-trading network, provides anonymous trading—was needed. Research by *Liquidnet*, New York, indicates the order management system firm's client base typically trades 250,000 shares or more through a broker at one time. Mr. Merrin claims investors pay high transaction costs and damage liquidity by exposing themselves to the open market.

The firm would not make public its listing of 170 members, but any individual client must have at least \$30 billion in assets. Alfred Eskandar, **Liquidnet** director of marketing, referred to the company as a "country club."

**Liquidnet's** five-member board of directors includes Michael Price, chairman of Franklin Mutual Series, Short Hills, N.J., and Lawrence Zicklin, chairman at Neuberger Berman LLC, New York

### Anonymous liquidity

**Liquidnet**, which will act as a clearing broker, will charge commissions of 2 cents a share. According to the Plexus Group, a research firm in Los Angeles, the average commission cost currently is close to 5 cents per share, and the average market impact cost is near 9 cents. Other than commissions, **Liquidnet** traders will face few additional costs. The company plans to significantly reduce market impact costs – to 1 cent per share, by Mr. Eskander's estimate – since shares won't be traded in the open market. **Liquidnet** clients will not pay annual membership or license agreement fees. Also, no minimum will be set on the amount of shares that must be traded at one time

"It's a great way for liquidity to be found anonymously," said David Hall, president of Plexus.

Mr. Hall has seen a demo of the **Liquidnet** service and found it "potentially very useful." Electronic communications and cross-trading networks are not capable of the anonymity, he said.

**Liquidnet** and Plexus agree that trading huge quantities of equities on the open market can be very costly. When investors see hundreds of thousands of shares being traded, they may react in a way that drives down the stock's value. **Liquidnet** trading will occur in a closed environment where outsiders will not be aware of trades.

Mr. Hall cautioned, however, that nothing inherent in the platform combats delay costs; in fact, **Liquidnet** users, operating in a smaller, closed system, might not be able to sell stocks as quickly as they would be able to on the open market. The new platform will "only be successful if people make it a success," added Mr. Hall. He estimated nine out of every 10 products designed for the institutional investing community fail.

Plexus estimated the average current costs for missed trades and delays is 7 and 24 cents per share, respectively. Mr. Eskandar contends **Liquidnet** clients will see reductions in both areas. "The system (reduces) friction" with its peer-to-peer network, he said. He said 53% of the equities market is institutional; and retail clients seldom trade as many as 250,000 shares at once.

The system is very "user friendly," said James Mangan, director, head equity trader at Citicorp Global Asset Management, Stamford, Conn; he added, "I can't see why it wouldn't do well."

### OptiMark comparison

Mr. Mangan is a member of **Liquidnet's** advisory board. He had been on the advisory committee for OptiMark Inc., which had offered an alternative trading system that allowed for intermarket (institutional) trading.

Nicola Nichol, an OptiMark spokeswoman, said, "[We were] not able to attract the liquidity we needed." The system was shut down in September. The Jersey City, N.J. firm continues to provide matching and aggregation services.

The OptiMark service was similar to **Liquidnet**, but it required clients to create profiles and it executed trades automatically, said Mr. Mangan, who said his firm's only trade on OptiMark was an error. Mr. Mangan said he is a lot more optimistic about **Liquidnet** because it will not be as cumbersome as OptiMark was, and it will not make automatic trades.

Said Mr. Hall: "The institutional investing community didn't want to be a price-maker," which is something he feels OptiMark required their clients to be.

When **Liquidnet** began marketing its service this past spring, the company planned to launch in 2001 with a capacity of 100 clients. The first 100 firms are still expected to go live at that time. The remaining 70 clients are expected to be added soon after.

Mr. Merrin has some experience in the buy-side trading area. In 1985, he created the Merrin Financial Trading Platform, a buy-side order management system that was widely used by institutional investors by the time Merrin Financial was sold to Automatic Data Processing Inc. in 1996; "they made an offer that was too good to refuse," he said. In late 1999, he left the firm, which subsequently was sold to McGregor Group.

**Liquidnet** has established technology partnerships with Advent Software Inc., Eze Castle Software and McGregor.

PHOTO (COLOR): **Liquidnet's** Seth Merrin said it had been clear for some time that the system was needed.

PHOTO (COLOR): **Liquidnet's** Alfred Eskander estimates the platform will reduce market impact costs to 1 cent per share.

~~~~~

By Mike Kennedy

---

Copyright of **Pensions & Investments** is the property of Crain Communications Inc. (MI) and its content may not be copied or e-mailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or e-mail articles for individual use.

Source: **Pensions & Investments**, 12/11/2000, Vol. 28 Issue 25, p2, 2p

Item: 3926166

[Top of Page](#)

---

Formats:  [Citation](#)  [HTML Full Text](#)

41 of 47  [Result List](#) | [Refine Search](#)  [Print](#)  [E-mail](#)

 [Save](#)  [Add to folder](#)

 [Folder is empty.](#)

Research  
Databases

Sign In to My EBSCOhost

[New Search](#) | [View Folder](#) | [Preferences](#) | [Help](#)

|              |                  |                  |
|--------------|------------------|------------------|
| Basic Search | Advanced Search  | Company Profiles |
| Keyword      | Publications     | Thesaurus        |
| Indexes      | Cited References | Language         |

40 of 47 ▸ [Result List](#) | [Refine Search](#) [Print](#) [E-mail](#) [Save](#) [Add to folder](#) [Folder is empty.](#)Formats: [Citation](#) [HTML Full Text](#)**Title:** The Secret Matchmaker.**Authors:** Propson, David**Source:** Business 2.0; 03/06/2001, Vol. 6 Issue 5, p90, 3p, 1c**Document Type:** Article**Subject Terms:** \*STOCKS  
\*INTERNET industry**Geographic Terms:** UNITED States**Company/Entity:** LIQUIDNET Inc.**NAICS/Industry Codes:** 52321 Securities and Commodity Exchanges**People:** MERRIN, Seth**Abstract:** Focuses on financial veteran Seth Merrin's formation of *Liquidnet*, a system to match large stock orders in the United States. Establishment of an exclusive online market for big traders; Appeal to institutions that do not want to radically alter the way they conduct business; Fund management firms' problem with information leakage.**Full Text Word Count:** 2107**ISSN:** 1538-1730**Accession Number:** 4114686**Persistent link to this record:** <http://search.epnet.com/login.aspx?direct=true&db=buh&an=4114686>**Database:** Business Source Premier[Choose Language](#)

\* \* \*

**BUSINESS****Section:** Investing**THE SECRET MATCHMAKER****Contents****Two years ago OptiMark promised and failed to revolutionize**

Plugging the leaks

A club of their own

Not the primary market

Broker

Peer-to-Peer Wall Street

## trading. **Liquidnet's** more modest plan--opening an exclusive online market for big traders--might succeed.

What if Wall Street threw a market and nobody came?

That has already happened once in the short history of the New Economy. The company was OptiMark (see "Big Storm Rising," September 1998, p58), which planned to make trading more efficient for institutional investors through supercomputer-based trade execution. Founded by longtime securities trader and onetime Instinet CEO Bill Lupien, OptiMark was initially applauded by Wall Street veterans. But by last fall the company was out of the trading business altogether.

OptiMark wanted nothing less than to revolutionize the way stock markets worked. It provided servers, software, access, training, and support free of charge. But its interface was too complicated, its supercomputer-powered algorithms too arcane, and it couldn't deliver the one thing all traders want: liquidity. By October 2000, OptiMark became merely another consulting firm, selling its expertise and technology to Nasdaq.

Even as these announcements hit the wires, financial veteran Seth Merrin was gearing up to launch **Liquidnet**, a system to match large stock orders. With a little more than \$13 million of first-round financing--far less than OptiMark's \$150 million venture stake--**Liquidnet** expects to go live late in the first quarter.

Like its budget, **LiquidNet's** business plan is relatively modest. The company will avoid introducing complicated equipment and use its Internet and PC software to provide trading anonymity to members of an exclusive "club" comprised of Wall Streets largest investors. The plan likely will appeal to institutions that don't want to radically alter the way they conduct business. And it could be a moneymaker for **Liquidnet**, which plans to charge smaller-than-standard commissions, but will collect from both buyers and sellers with every transaction.

Even OptiMark's remaining executives see potential in the **Liquidnet** plan. "Seth Merrin has a good chance to be successful," says Robert Warshaw, one of OptiMark's new co-CEOs. "But he'll face the same problems we did."

Perhaps new problems. "Every single person we talk to mentions OptiMark," says Alfred Eskandar, **Liquidnet's** director of marketing. **Liquidnet** is one of a long line of second-generation startups forced to labor in the shadows of first movers that bet big and lost. "OptiMark was such a spectacular failure," Merrin says. "People are skeptical."

## Plugging the leaks

That skepticism is understandable, since both companies set out to offer similar service on the so-called buy side of the stock market.

The small group of investors targeted by **Liquidnet**--banks, insurance firms, and pension fund and mutual fund managers--account for most of the action on the markets. Their holdings are in turn managed by about 800 big firms, such as Janus Capital, which control almost \$12 trillion in equities.

So far, **Liquidnet** has signed up 165 of these firms, a few more clients than OptiMark had when it launched in 1998. Eskandar says its members represent more than \$5 trillion in equities. The company refuses to disclose the identities of its customers, but its board includes several members of the industry establishment, including the former CEOs of Heine Securities and OppenheimerFunds.

The biggest problem fund management firms face is so-called information leakage: They traffic in such large quantities of stock that a mere rumor that they are looking to buy a given stock can drive up prices.

Upon receiving news that a trader is looking to buy 100,000 shares of IBM at \$113, for example, a wily investor would start bumping up the price. This "market impact" costs big investors far more than broker commissions, according to the Plexus Group, a financial consultancy that advises institutions.

To plug the leaks, traders tend to parcel out transactions, dividing them into small, less notable orders distributed to different brokers. This keeps the markets and even investor agents in the dark.

In addition, smaller investors often make their money by guessing which way institutions will move, according to Kevin Cronin, head of domestic trading for AIM Management Group in Houston and a member of *Liquidnet's* unpaid advisory board. "The day traders have taken over the Nasdaq," Cronin gripes. "Essentially, an enormous community of people wants nothing more than to steal money from us."

Ideally, institutional investors would like to be able to trade without letting the market know who they are or how much they want to trade. That's why institutional traders are among those leading the charge toward electronic markets, which promise greater anonymity and grant firms the ability to make large trades almost instantaneously.

Currently, the most popular electronic matching systems are Reuters' Instinet subsidiary and The Island ECN, which mostly serves individual investors. But all these systems essentially recreate the action on a traditional trading floor and so still penalize institutional investors, according to Merrin. They do nothing to solve information leakage.

OptiMark aimed to solve that problem by creating a completely automated, anonymous market. Traders gave the computer certain parameters for buying or selling a certain stock at a certain price. OptiMark's sophisticated algorithm compared parameters entered by other traders, and the computer then put together a deal it determined would be fair.

But many traders disliked the plan in practice. The order-entry process was notoriously complicated and required extensive training to use. "The system expected us to change the whole way we traded," Cronin says. "There was a sort of arrogance to this system that was forced upon us, and it made a lot of us recoil."

*Liquidnet's* system, on the other hand, is designed to be as unobtrusive as possible. It simply looks at what members are willing to trade and lets them know if anyone else can meet the need. To do this, *Liquidnet's* software resides right on a trader's PC, and interfaces with his management firm's order management system, which tells traders what to buy and sell.

*Liquidnet's* software takes the buy and sell information and sends it securely via the Internet to *Liquidnet's* servers. If the needs of another *Liquidnet* user match closely, *Liquidnet* notifies both traders through their PCs with instant-message-like windows and the trades occur separately from the traditional stock markets, then are reported to those markets.

Using OptiMark, a trader looking to buy 100,000 shares of IBM would have to enter guidelines explaining that they'd be willing to buy 100,000 at \$113 but only 25,000 at \$114, and so on.

*Liquidnet's* system, by contrast, knows that the trader wants 100,000 shares, and will tell him when someone else's order management system shows a "Sell" order of a significant amount. The two traders are then given 30 seconds to approve the deal, or decide to keep looking. Neither knows who the other is, but they do see eBay-like ratings of how reliable this particular trading partner has been in the past.

### A club of their own

Complex technology was the least of OptiMark's problems. Even when institutional traders could use its interface, they often couldn't find anyone to trade with. This is the challenge all new markets face. In an established market such as the New York Stock Exchange, buyers are matched with sellers. But fledgling exchanges run a higher risk.

"We learned how hard it is to start from scratch and build liquidity," OptiMark's CEO Warshaw says. The company hoped to avoid this by opening up the system to all comers and by distributing computers and software free. But when traders stayed away, the system was unable to match most orders, and the company never got near its initial projections of 15 million to 20 million shares per day.

**Liquidnet** plans to solve the liquidity problem by limiting membership solely to the buy side. The only investors that traffic in the large quantities institutional investors want to buy are other institutional investors, Merrin reasons, so why not just let them trade with one another? He compares **Liquidnet** to a country club and insists on referring to its client institutions as "members."

"This is conceived so that the buy side can interact with itself and sort of circumvent the brokers," says Holly Stark, director of trading for Kern Capital Management, which has not yet signed on with **Liquidnet**.

Since the system lets members look at one another's books, Merrin hopes to create a community of trusting traders. Like OptiMark, **Liquidnet** gives away its software to clients, but the members need an order management system to use it.

If anyone understands this field, it's Merrin. In 1985 he founded Merrin Financial, now owned by The MacGregor Group. Merrin's company pioneered the concept and sold the industry on order management systems.

### Not the primary market

**Liquidnet's** exclusivity is also essential to its revenue model. Like any other broker, **Liquidnet** will take a commission when it helps a client make a deal.

But since every trade will be between two of its own members, it will take a commission on both sides of the deal. This means it can take a smaller cut than traditional brokers do—about a third of the 6-cents-per-share industry average, according to marketing director Eskandar.

He estimates that 1 billion to 2 billion shares will be available on the system from day one, and that **Liquidnet** will be able to match about a quarter of these. If that's true, the company immediately would generate revenue in the range of \$5 million to \$10 million per day.

The real test won't come until the system goes live. "I'll have to play with it to see if it's as easy as they say," says Kern Capital's Stark. She points out that **Liquidnet** does ask traders to change habits in one significant way: Most are not used to such large transactions and will have to adjust their strategies accordingly. The current practice of buying small portions at several different times is coveted not only because it limits the number of information leaks but also because it protects investors from volatile markets.

The built-in exclusivity of the system might also keep some potential participants away, according to Natan Tiefenbrun, senior vice president of global trading for Instinet. If they don't find precisely what they want, they can find a wider range of trading partners through one of **Liquidnet's** competitors—and the financial world has more competing trading venues than ever.

That's why it's misleading to judge **Liquidnet's** prospects merely by the total amount of equities its members manage. According to Eskandar, **Liquidnet's** members represent about 35 percent of all equities under institutional management. But that number looks less impressive when compared to Instinet, which shares many of the same clients and represents about 90 percent of the same equities.

Kevin Cronin of AIM Management Group says **Liquidnet** should never expect to handle all of its clients' transactions. "It is not designed to become the be-all, end-all exchange," he says. Traders may have to keep an eye on other markets, Tiefenbrun says, if only to know the going rates.

Another potential problem: **Liquidnet** could falter if a major stock exchange develops an effective

electronic system to let investors of all sizes trade with one another, as OptiMark attempted. "One of these days someone is going to get a system like this right, and it's going to be a threat to New York," Cronin says.

**Liquidnet** isn't trying to be that system. It simply provides a way to make buy-side trading secret and liquid—which is exactly what buy-side traders are looking for today. If Merrin meets even that modest goal, it will be a major accomplishment.

### Broker

Unlike a sanctioned brokerage, any company calling itself an "exchange" is subject to myriad SEC regulations.

PHOTO (COLOR): The matchmaker: **Liquidnet's** Seth Merrin hopes traders take to his new trade-matching system.

### Peer-to-Peer Wall Street

For large orders, institutional investors can use **Liquidnet's** exclusive, stealth trading system instead of the established stock markets.

1. Fund manager Smith wants to sell 100,000 shares of X, which is trading at \$20, but is worried that putting the large order in the market would send the stock down.
2. Smith enters his order in **Liquidnet** anonymously to sell 100,000 shares.
3. The order goes to **Liquidnet's** servers, where a software program searches for a match.
4. A **liquidnet** instant message says an anonymous party with a high rating is offering to buy 100,000 shares of X for \$21 a share. Smith has 30 seconds to accept it, which he does.
5. Smith gets \$2.1 million, minus a commission to **Liquidnet** of roughly \$2,000. The trade is reported to the market, sending X's price down \$19 a share. Smith has saved about \$200,000.

~~~~~

By David Propson aupt

David Propson (oddovid@yahoo.com) is senior editor for Small Business Computing in New York.

---

Copyright © Time Inc., 2001. All rights reserved. No part of this material may be duplicated or disseminated without permission.

[Top of Page](#)

---

Formats:  Citation  HTML Full Text

◀ 40 of 47 ▶ [Result List](#) | [Refine Search](#)

 Print  E-mail

 Save  Add to folder

 Folder is empty.



Research  
Databases

Sign In to My EBSCOhost

[New Search](#) | [View Folder](#) | [Preferences](#) | [Help](#)Basic  
SearchAdvanced  
SearchThesis  
Guidelines

Keywords

Publications

Company Profiles

Thesaurus

Language

Indexing

Cited references

4 34 of 47 ▸ [Result List](#) | [Refine Search](#) | [Print](#) [E-mail](#)[Save](#) [Add to folder](#)[Folder is empty.](#)Formats: [Citation](#)**Title:** *Will Liquidnet Catch the Buy Side?***Authors:** Guerra, Anthony**Source:** Wall Street & Technology; Jul2001, Vol. 19 Issue 7, p75, 3p, 1c**Document Type:** Article**Subject Terms:** \*STOCKS  
\*SECURITIES industry  
Equipment & supplies**Company/Entity:** LIQUIDNET Inc.**NAICS/Industry Codes:** 52321 Securities and Commodity Exchanges**Abstract:** Reports on the peer-to-peer network system offered by *Liquidnet* to stock traders. Risk heeded by Seth Merrin in devising *Liquidnet's* design; Average *Liquidnet* trade as of the middle of May 2001; One of the features of the system offered by *Liquidnet*.**Full Text Word Count:** 2587**ISSN:** 1060-989X**Accession Number:** 4726963**Persistent link to this record:** <http://search.epnet.com/login.aspx?direct=true&db=buh&an=4726963>**Database:** Business Source PremierFormats: [Citation](#)

## Will Liquidnet Catch the Buy Side?

PEER TO PEER

By **Anthony Guerra**

Wall Street & Technology

June 11, 2001

CEOs of nascent alternative trading systems (ATSs) know one thing above all others—the brief period of time immediately following launch is a dangerous one, filled with fear that an inauspicious start could have far-reaching consequences difficult to remedy. Seth Merrin, CEO of still-teething Liquidnet, which "opened its doors" on April 10, knows that as well as anyone.

"When you're starting out you have to have some traders entering orders, you don't have any time in this business to build up a critical mass of liquidity to keep traders interested in coming back," he says. "Traders will not spend the time to keep on entering orders into a system where they're not getting executions back out of it."

Merrin learned that lesson, along with the rest of the industry, watching Optimark launch its ill-fated trading network for buy-side institutions early in 1999, only to see the highly touted system fizzle and die (Optimark has altered its business model and is now helping Nasdaq build its new SuperMontage trading environment).

Industry analysts and insiders mused over the evaporation of Optimark's liquidity pool and came up with a few pointers for the next brave soul looking to create an oasis in cyberspace. The cardinal caveat, which Merrin seems to have heeded in devising Liquidnet's design, springs from the realization that buy-side traders, much like the rest of us, dislike anything that takes them out of their normal routine—let alone something that brazenly asks them to do what some have likened to composing algorithms.

So the Liquidnet plan would be different, a system which automatically gets first crack at every order on the asset managers blotter without asking the trader to make one mouse click—an industrial strength peer-to-peer network boasting advanced encryption, guaranteed message delivery and secure socket layer protection that maintains communication between the Windows-based Liquidnet applications at all participating buy-side institutions, notifying traders when a possible match to their order exists.

If that should happen, a trader would then decide if he or she wants to make the order active and begin negotiations for the price and amount of the security in question, with Liquidnet taking a two cents per share cut (ITG's well-established crossing network, Posit, charges the same). Sounds simple.

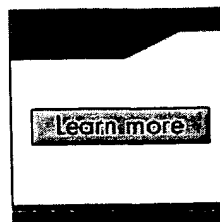
In fact, at the open, things haven't been too bad for the upstart ATS. As of the middle of May, Merrin says, the average Liquidnet trade was about 75,000 shares with 4.5 million shares moving through the system daily—not a bad start, he says, though 20 million shares a day is his goal. Also, nine out of ten executions were being done within the spread and 32 percent of those were traded at the midpoint.

Merrin, however, says more liquidity is what Liquidnet needs to really take off. By its very nature, the fact that all orders automatically go into the system, adding more firms virtually guarantees additional liquidity. At launch, Liquidnet had 38 firms on board and by the middle of May that number reached 43 with 30 more committed to incorporation and another 10 agreements close to bearing signatures.

Leo Smith, head of equity trading at Putnam Investments, a global money management firm with \$345 billion in assets under management, who also sits on Liquidnet's advisory board, says one of the best features of the system is that its functionality is not contingent upon traders going out of their way. Additionally, the system seeks to solve the greatest issue traders face when trying to move large blocks of stock. "I think that at the end of the day the thing that's most appealing about Liquidnet is the fact that you can really and truly maintain your anonymity in the marketplace," he says.

And therein lies the attraction, the point, Liquidnet's *raison d'être*—to provide a means for buy-side institutions to move large blocks of stock without moving the market, something brokers risk doing when they tip their hand while looking for a trade counterparty. Liquidnet logic says that cutting out the sell side and its agent, the broker, should help eliminate that risk of market impact—in Liquidnet, it's a buy-side affair.

But, according to Richard Rosenblatt, president of Richard Rosenblatt and Co., an equity-trading firm established in 1979, that line of thought assumes brokers bring nothing but bad manners to the table.



### Sponsored Links

[Performance Management initiatives for successful implementation.](#)

[Performance Management initiatives for successful implementation.](#)

### RELATED STORIES

[Smooth Transition Expected For Citigroup, Legg Mason Customers](#)

[Ameritrade CEO: Consolidation vital for success](#)

[Two More Seat Holders Sue NYSE Over Archipelago Merger](#)

[IPC Introduces Enterprise Voice Services](#)

[Eze Castle Eases Trading](#)

[StreamBase Expands Real-Time Platform](#)

### CHECK THIS OUT

[Algorithmic Trading Directory](#)  
Find out the answers to key questions about the leading algorithmic trading providers using WS&T's easy-to-use online resource.

[The Latest Rankings from Gómez](#)

[Our Buyers' Guide](#) is a must-have list full of vendor and product details for hundreds of vendors in more than 20 critical market-specific categories. Shouldn't you be browsing the Buyers' Guide before you make that decision? Shouldn't your company and its product be in the guide? It's FREE.

### WHITEPAPERS

[Meeting the Requirements of Basel's New Capital Accord](#)

Oracle has designed a Basel II solution to meet the requirement of incorporating risk management into daily business practices. By analyzing the different areas of credit, operational and market risk within the Basel Accord, Oracle has also defined the necessary components of a complete Basel compliant system.

2005 ONLINE  
BUYERS' GUIDE

The Industry's  
**#1**  
Resource Guide



**Click here to  
learn more.**

**intel®**

Liquidnet, he says, alters the fundamental way trading has been done for decades. "Once the two institutions find each other, if they're going to trade, they start negotiating price by themselves, whereas in the normal course of trading, the same institution would hire a broker to do that negotiating for them, so the presumption is that the broker has no special expertise in that area and is not value-added," he says.

Sang Lee, an analyst covering institutional e-trading with Celent Communications, a consulting and research company which helps financial institutions create new business strategies, says that sentiment reflects a larger suspicion in the marketplace that brokers may, at times, be a supernumerary link in the trading chain. "You will see increasing pressure on the broker-dealers. They are getting pressure from every side, really in every asset type, everyone is trying to figure out if they are really needed."

In Liquidnet's system, additionally, it's not only the broker who finds he or she has become superfluous but, in a sense, the trader as well. Rosenblatt says that one of a traders' main functions is to optimize market timing by knowing when and through which avenue to expose their orders, again a task automated by Liquidnet. "Usually the trader for the institution, who is also value-added, makes the decision on which stocks he wishes to expose to the marketplace," he says.

Merrin says that is still possible-traders still have the ability to shield certain orders from exposure to Liquidnet's eye. "By default every order comes into Liquidnet, now the members can filter out certain orders they don't want to come in," says Merrin.

That facet of Liquidnet's design has become a major point of contention, creating conflict between Liquidnet and one of the industry's leading trade order management (TOM) systems. Think of it this way: Liquidnet's success depends on liquidity that can only be attained by getting as many firms on the network as possible. In order to get a firm on board, an interface to its TOM needs to be built which is an involved and costly endeavor. When approaching a firm with Liquidnet's application in-hand, making that sale is much easier if it has already been integrated with the firm's TOM, leaving little integration pain to the firm itself.

For the most part, TOM vendors have facilitated their clients integration process by constructing interfaces to the system, working with Liquidnet independent of their clients' involvement. Some firms, however, like leading TOM vendors The LongView Group (over 60 clients) and Charles River Development (also over 60 clients) have not built that interface, leaving the onus of doing so on their clients, at least for the time being. Until those two firms are brought into the Liquidnet fold, Merrin and his team stare out at a vast liquidity pool which sits relatively untapped.

"They force their clients basically to write the interface themselves which they've done and in our ideal world we would be working closely with the vendors, which we're doing with MacGregor, Advent, Eze Castle and Decalog," says Merrin, "seems to me, perhaps, that those firms are more responsive to their clients needs for whatever the reason is."

Merrin says, though, that Liquidnet can still get clients of those firms onto the system rather easily as LongView and Charles River clients who have built a Liquidnet interface are allowing others to use it. The logic for such generosity being that for any client attending the Liquidnet party, the more people, the better.

"There's no cost in signing on to Liquidnet, no service fee, no minimum commitment," says Merrin. "All they have to do is sign a two-page agreement and we'll come in and do the install." He adds that installation process only takes about a half-an-hour.

A spokesperson for Charles River Development says that at the time the company was approached by Liquidnet, the commitment that an interface would require was not supported by a high degree of interest among Charles River clients. "We're deal driven here so we really needed to see demand before we went and invested the development resources," he says. Over the past few months, says the spokesperson, client interest in the network has grown, leaving Charles River ready and willing to help its clients tap in.

Annie Mariani, vice president global client services with The LongView Group, echoes the sentiment that client interest must drive any resource-consuming projects. She says that when LongView was approached by Liquidnet, her company also had more pressing initiatives on its to-do list.

### Leveraging Basel II Compliance to Build a Platform for Enterprise Risk

The eight elements, discussed in this paper, represent the design principles around which Oracle's Regulatory Capital Manager solution is constructed. They are the system level requirements that a financial services institution must meet to comply with the Basel II Accord.

### IT and Business Process Outsourcing in North American Financial Services

Outsourcing has become one of the key strategic options available to banks and insurers not only to cut costs but to improve operating efficiency. Offshore application outsourcing and business process outsourcing are amongst the more recent additions to mainstream thinking causing controversy both in terms of employment and strategic viability.

### Operational Risk and Regulatory Compliance in US and European Financial Services

Operational risk is discussed in the context of regulation like Basel II & SOX. The formalization of methods to measure & mitigate risks is new. The sector is expected to move beyond 'first phase' OpRisk activities. How should banks design next generation architectures? Which areas can add value in?

"We have some clients that are interested in using it and want to commit to using it, there is a very small handful of those and a couple of those clients are using it today," she says. "There are another few clients who say we will never use Liquidnet, they don't believe in the way they do things and then I would say the majority of our clients are either not that interested or they are on the fence and waiting to see if it takes off."

Mariani says the reason interfacing with Liquidnet must be carefully weighed against the cost is because integration with the ATS is no mean feat. Problems arise because Liquidnet is not Financial Information Exchange (FIX) compliant, using a proprietary stored-procedure API with a daemon that pulls the database. A daemon is a UNIX program that executes in the background ready to perform an operation when required-usually an unattended process that is initiated at startup.

She says that when first meeting with Liquidnet last summer, she learned that the ATS needed a brand new custom interface which would require two things: writing a stored procedure to pull out the data from the blotters and then, for the return of trade-execution information back into the TOM, using Structured Query Language (SQL)-a language used to interrogate and process data in a relational database.

Although Mariani says LongView never reached the point of detailed analysis that would have put a dollar figure on building the interface, she says the company is prepared to do whatever its clients deem most important. In the event that Liquidnet should reach such a favored status, she says LongView has recently asked for Liquidnet's final specifications so developers can have a better idea of how to tackle the problem if an interface gets the green light.

If LongView does decide to go ahead with the interface, however, Mariani says the company will do so in a manner corresponding with its clients wishes. She describes the requirement that all TOM orders flow into the Liquidnet system as a "functional discrepancy" because almost all LongView clients find that to be a major negative.

"Liquidnet is requesting the entire book or the entire blotter from the traders and all of the traders have made the statement to us that, 'We don't want to show our entire blotter, we want to have control over our blotter, and we want to be able to designate what Liquidnet sees,'" she says.

While Mariani says the two companies are not at an impasse and hopes to work through the point of contention, she says, "We'd much rather develop an interface that meets our traders desires rather than just build a standard interface to the specification from an ATS like Liquidnet."

If the time should come when traders working with LongView gain access to Liquidnet, they will still find themselves confronted with the same situation Ryen Munro, head trader with Essex Investment Management, an investment advisory firm founded in 1976 and specializing in growth equity and fixed income, faces when he sits down at his trading desk-where to look for liquidity.

While Liquidnet's paradigm does not require an active search on the system, the decision must still be made, when a possible order match is found, whether or not to do the deal over the network. "We have great relationships on the street (sell-side firms) and it pays off for us. Do I want to jeopardize that by doing too much business away from them?" asks Munro, who also sits on the Liquidnet advisory board. "So it's hard, it's difficult."

A senior industry player, who insists that his name not be used, says punishment from slighted sell-side firms could take on a number of forms. "They might be less willing to provide capital to make bids and offers in less liquid stocks. I don't think there's any question that firms that commit capital for the benefit of their clients commit more capital and at tighter prices for their better clients, so that is one area that certainly could be affected," says the source.

He also mentions the fact that sell-side firms, which sometimes shop orders around to their best customers might be less inclined to dial the numbers of an institution that no longer regards the involvement of brokers as beneficial.

Munro says that although he is on the Liquidnet advisory board and although relationships on the Street may be affected, he is always committed to getting the best prices for his clients and will thus go wherever he needs to go.

Rosenblatt questions whether a trading environment like Liquidnet, which he likens to an OTC model and calls "trading in a closet," is one where best price is likely to be found. By design, the model sees a bid and offer matched, followed by negotiation between the two parties during which the details of the

trade are finalized. He says that atmosphere precludes other firms from injecting better bids and offers which often results in an improved price for the customer.

Merrin stands by his model as an easy way to move large blocks of stock without moving the market. He says feedback from participating members has been positive with most just looking for the pipelined firms to come on-line ASAP, delivering an instant infusion of liquidity. Specifically, he says, new customer-requested features such as instant chat, which could function as a means for clients to entice each other into activating dormant orders, will be included in the next major version release which is due out near the end of the third quarter.

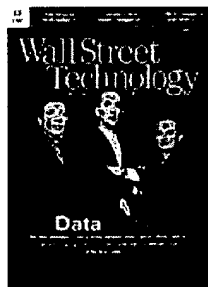
Merrin says he will consider the venture a success if liquidity on the network reaches and maintains his goal of 20 million shares a day but, as LongView's Mariani says, since liquidity for Liquidnet is all about participation, the wait and see attitude of many firms can mean simply watching a slow decline. "For a company like Liquidnet that's tough because it's the wait and see people that they need the liquidity from," she says.

Liquidnet's best hope for success, however, may lie in a sentiment expressed by Essex Investment's Munro, "I need to have resources such as Liquidnet available, I need access to it and I think it's good for my clients to have the potential to have orders or trades in there. I wouldn't want to be left out."

Some of Liquidnet Participants Include:

- AIM Management Group
- Essex Investment Management
- Putnam Investment Management, Inc.
- SSB Citi Asset Management Group
- Scudder Kemper Investments
- T. Rowe Price
- Pimco Equity Advisors
- Northern Trust Global Advisors
- American Century Investment Management

#### CURRENT ISSUE



[Past Issues](#)  
[Supplements](#)  
[Subscribe](#)  
[E-Mail News](#)

 [PRINT THIS ARTICLE](#)

 [E-MAIL THIS ARTICLE](#)

Research  
Databases

Sign In to My EBSCOhost

[New Search](#) | [View Folder](#) | [Preferences](#) | [Help](#)Basic  
SearchAdvanced  
SearchDatabase  
Help

Keywords

Publication

Company Profiles

Thesaurus

Language

Indexes

Cited References

16 of 47 ▸ [Result List](#) | [Refine Search](#) | [Print](#) | [E-mail](#)[Save](#) | [Add to folder](#)

Folder is empty.

Formats: [Citation](#) | [HTML Full Text](#)**Title:** Your Fund Vs. Wall Street.**Authors:** Birger, Jon**Source:** Money; Apr2004, Vol. 33 Issue 4, p121, 2p, 1c**Document Type:** Article**Subject Terms:** \*BROKERS  
\*CAPITALISTS & financiers  
\*INSIDER trading in securities  
\*MUTUAL funds  
\*INTERNET industry  
WALL Street**Company/Entity:** LIQUIDNET Inc.**NAICS/Industry Codes:** 523999 Miscellaneous Financial Investment Activities  
52321 Securities and Commodity Exchanges  
52591 Open-End Investment Funds**People:** PRICE, Michael  
KRAMER, George

**Abstract:** Legendary investor Michael Price says big brokerages are ripping off mutual funds. And that costs you money. Michael Price is not your typical venture capitalist. During his 23 years running the Mutual Series funds, Price had little use for trendy technology companies, preferring to twist the arm of a slothful bank CEO rather than pay a premium for a Microsoft or Cisco stock. So when MONEY learned that Price had invested several million dollars of his own money in an Internet start-up called *Liquidnet*, we wondered whether the man once dubbed "The Scariest SOB on Wall Street" was letting all that Palm Beach ocean air go to his head. *Liquidnet* is a fast-growing online trading network that allows mutual fund managers to swap large blocks of stock over the Internet, all without a traditional broker. Some market watchers think the firm could eventually pose a major threat to Wall Street profits. But Price says *Liquidnet* is even more important than that. He claims it can save fund investors from getting ripped off. It's not what you're thinking. Price is as outraged as anyone about the recent mutual fund market-timing scandal. But in terms of actual economic harm, he says, these abuses are small potatoes compared with inflated trading costs, the problem *Liquidnet* is designed to solve. INSET: What Price is—and isn't—buying.

**Full Text Word Count:** 1347**ISSN:** 0149-4953**Accession Number:** 12491777**Persistent link to this record:** <http://search.epnet.com/login.aspx?direct=true&db=buh&an=12491777>

Database: Business Source Premier

[Choose Language](#)  [Translate](#) 

\* \* \*

# money

Section: fund watch

## Your Fund Vs. Wall Street

### Contents

[Follow your money](#)[Game over?](#)

### Legendary investor Michael Price says big brokerages are ripping off mutual funds. And that costs you money

Michael Price is not your typical venture capitalist. During his 23 years running the Mutual Series funds, Price had little use for trendy technology companies, preferring to twist the arm of a slothful bank CEO rather than pay a premium for a Microsoft or Cisco stock. (His tactics worked: Price's flagship Mutual Shares racked up an annualized 17% over his career.) So when MONEY learned that Price had invested several million dollars of his own money in an Internet start-up called **Liquidnet**, we wondered whether the man once dubbed "The Scariest SOB on Wall Street" was letting all that Palm Beach ocean air go to his head. It turns out that the 52-year-old is as scary as ever, even in semiretirement.

**Liquidnet** is a fast-growing online trading network that allows mutual fund managers to swap large blocks of stock over the Internet, all without a traditional broker. Some market watchers think the firm could eventually pose a major threat to Wall Street profits. But Price says **Liquidnet** is even more important than that. He claims it can save fund investors from getting ripped off.

It's not what you're thinking. Price is as outraged as anyone about the recent mutual fund market-timing scandal. But in terms of actual economic harm, he says, these abuses are small potatoes compared with inflated trading costs, the problem **Liquidnet** is designed to solve. Price reckons that brokers nick fund investors for upwards of \$50 billion a year. "The numbers are huge," says Price.

### Follow your money

Let's stipulate right off that, as a **Liquidnet** backer, Price has an obvious interest in painting the worst possible picture of Wall Street's status quo. But he lays out a compelling case. Generally, when your mutual fund buys or sells a stock, it goes through a broker. Trading commissions, which come right out of your returns, typically run about 5¢ a share. **Liquidnet's** charge is 2¢. But the real bite, Price says, comes from the market impact of the fund's trade.

Let's say your fund places an order through a traditional broker to sell 100,000 shares of Nike. The broker will probably divvy that order up among multiple traders, who in turn call multiple potential buyers. Trouble is, the more people who know about a big sell order, the greater the risk that a hedge fund or some other opportunist will get wind of the order and attempt to trade against it. How? Usually by shorting Nike stock (that is, betting it will go down) either before your fund's order gets filled or afterward, if they suspect the seller has more shares to unload. That means that when your fund does sell, it will probably get a lower price for its Nike stock. And you end up with a lower return.

Price even alleges that brokerages use their unique knowledge of buy and sell orders to make money at their clients' expense. "Brokers have options departments, block-trading departments, arbitrage

departments, and all the time they're positioning themselves against client orders—selling against a big sell order or buying against a big buy order," says Price. "It's their bread and butter." Suffice it to say, brokers don't take kindly to being accused of what sounds a bit like insider trading. "Any implication that we use or share a client's trade information inappropriately is outrageous," says a spokesman at Goldman Sachs.

Securities Industry Association general counsel George Kramer says the kind of trading activity Price describes is allowable, so long as the brokerage is only guessing about future orders. And in an era of falling commissions, brokers need the money. "It wasn't always the business model of the Street," says Bernstein Research analyst Brad Hintz. "But it's become so lately—not out of malevolence but out of necessity."

### Game over?

Good fund managers know this stuff goes on and hire canny traders to combat it. "I can't speak for others, but I can tell you we are in the business of trying to win on every trade," says Andy Brooks, who runs the equity trading desk for T. Rowe Price. But Michael Price argues that at some fund companies, at least, nobody really knows what the traders are up to. He especially wants to see fund directors wake up to the problem. "How many directors have ever sat on a trading desk for half a day and asked their trader, Why did you give that trade to that broker?" he says. "Is it because you got the best price? Or is it because he gave you Rangers tickets the night before?"

**Liquidnet** takes hockey out of the equation, so to speak, by making trades invisible to the Street until after they're done. **Liquidnet's** Web software is linked to the order-management systems used by nearly all fund managers. So let's say a Vanguard fund wants to sell 100,000 shares of Nike. The moment its trader enters the sell order into the system, **Liquidnet** instantly scours the buy orders of other **Liquidnet** members to see if there's a natural match. If it turns out that T. Rowe Price is looking to buy 100,000 shares of Nike, **Liquidnet** notifies the two firms of the match and gives their traders a brief window of time to anonymously negotiate a trade online. Since most trades are completed at or near the stock's real-time price, the market impact is low.

Only three years old, **Liquidnet** is now the nation's 19th-largest broker of New York Stock Exchange shares. Its average daily trading volume has more than tripled over the past year to 19 million shares, and its network of participating money managers now adds up to 85% of the mutual fund industry. Indeed, **Liquidnet** has all the makings of a hot initial public offering, either later this year or in 2005. Michael Price, in other words, has definitely not lost his edge.

PHOTO (COLOR): Michael Price

~~~~~

By Jon Birger

### THE "SOB" SPEAKS

#### What Price is--and isn't--buying

He dropped out of the fund biz six years ago, but Michael Price has not retired from investing. His family investment fund, MFP Investors, currently manages more than \$700 million. Here's his take on the market and a few stocks he's been watching

THE MARKET For Price, some bad news would be good news. "Stocks are fully priced," he says. "What am I looking for? A scandal. An earnings disappointment. You've got to wait for the bad news to get a bargain." The scarcity of cheap stocks has Price 20% in cash.

## Wall Street & Technology

### New Kids on the Block

Mar 26, 2004

URL: <http://www.wallstreetandtech.com/showArticle.jhtml?articleID=18402829>

It's no secret that buy-side institutions are having a hard time executing large blocks of stock in sizes of 10,000 shares or higher. Under the current market structure, institutions often shred their orders into smaller chunks to avoid leaking information to brokers or specialists and moving the market. "Trade sizes are definitely [being executed] smaller, and you can end up having your order nibbled to death," says Miranda Mizen, senior analyst in TowerGroup's Securities and Capital Markets Group. "That's not the way you [want to] trade a block. You'd rather negotiate it" and meet at the midpoint of the bid/ask spread, advises Mizen.

There is no shortage of electronic block-execution systems aimed at helping buy-side institutions match large buy and sell orders against one another [see sidebar]. Now, two newcomers are entering the space: Instinet Continuous Block Crossing (CBX) and Pipeline from Pipeline Trading Systems.

On Feb. 9, Instinet launched CBX, an institutional block-trading platform for U.S. securities, which works in conjunction with the company's Proactive SmartRouter, an advanced order-routing facility. CBX gives institutions the ability to trade blocks of large equity orders directly and anonymously, while allowing them to simultaneously represent the remaining shares of their limit orders on major electronic-communications networks (ECNs) and the NYSE.

Mike Plunkett, president, Instinet, North America Division, believes CBX has liquidity on its side, given that Instinet trades about 99 million shares a day and has 1,000 institutional clients. "We're not the first ones to think about crossing large blocks with natural liquidity, low market impact, anonymity, all those things," says Plunkett. "The downside is that, at times, you're temporarily out of the market," he adds, meaning that when a portion of an institutional order is waiting for a match in CBX, that portion is not exposed to the exchanges or ECNs.

For example, if an institution has a 100,000-share order, it can put 35,000 shares on CBX and divide the remaining shares among INET, ArcaExchange and SuperMontage, says Plunkett. "You're in four spots at a clip," he says. "If the order starts to trade on INET [but nothing has happened on CBX], the smart router will take another piece from CBX and put it on INET, and automatically reload [shares from CBX] as INET trades," he explains. This will continue until the entire block is traded.

### Block-Trading Interest Escalates

Why is there increased interest in block-execution systems? Institutions prefer to cross stock with communities of buyers and sellers, rather than reveal their intentions to specialists, or interact with day traders and arbitrageurs, say several sources.

Though institutions are in a protected environment, they still want the opportunity to get a better price. With CBX - which is offered by Instinet's value-added broker as opposed to the ECN side of the business - institutions

can use order types found in ECNs to conceal their order size. For the first time, ECN order types are being combined with a block-execution system, notes TowerGroup's Mizen, referring to CBX's reserve and discretion features.

The reserve feature allows traders to hide the full amount of shares they want to buy or sell. "Visibly, you'll see 1,000 shares, but it's actually 25,000 shares the person is trying to buy," explains Instinet's Plunkett. CBX also offers discretion - a trader may set a top price of 50 cents to buy, while the visible market price is 46 cents. If bids come in under 50 cents, then the trader will automatically buy, without having to show his hand.

Meanwhile, Pipeline addresses "criticisms of existing systems out there," including CBX, says Jamie Selway, managing director of Whitecap Trading, an institutional agency brokerage firm. With Pipeline, "Transactions are consummated by a computer, they're not [negotiated] by a human being," he says.

A second criticism of other block-execution systems is that they do not allow brokers into the system, which limits the liquidity that's available, adds Selway. In Pipeline's case, however, traders watch the Pipeline Block Board, where block orders are advertised. Traders are notified when a large order has entered the system - but they won't be told whether it's a buy or sell order to prevent information leakage. "Other traders could then enter their own hidden orders knowing that there is a very good chance for execution," says Fred Federspiel, president of Pipeline. If the prices match, the trades are immediately executed.

Regarding Pipeline's automatic execution, Whitecap's Selway says, "This thing transacts without any footprint. Using the system, there's not going to be any information leakage."

But do the new block-execution systems offer anything new? Andy Brooks, head of equity trading at T. Rowe Price, says, "We are always willing at least to examine innovation and new entrants as they appear." Though Brooks is not yet familiar with the new Instinet product, he notes, "It [doesn't seem] any different than the POSIT cross. "If it's a me-too product, that really doesn't excite anyone." But regarding Pipeline, Brooks says, "They have a couple of twists that are not available in some of the other networks."

If buy-side firms are already using multiple systems - sources say they have their favorite two or three - how many systems can the buy-side look at? "That's the crux of the matter," says Jay Fraser, a director of ITG Group. "People will vote with their feet, and it doesn't take long."

### **A Chip Off the Old Block**

Instinet Continuous Block Crossing (CBX) and Pipeline Trading Systems are both entering a crowded field of block-execution systems. The current major player is POSIT - Portfolio System for Institutional Trading - from ITG Group. As the largest intra-day crossing system, it runs 13 intra-day crosses per day and two after-hours crosses, with daily volume in the mid-to-high 20 million share range. "There aren't any other places where you could immediately execute a \$30 million list, and we do it 13 times a day," says Jay Fraser, director of ITG Group and one of the managers on its sales trading desk.

The second largest block-execution system is LiquidNet, a buy-side-only block-matching system that reads firms' order-management systems and, when a match is found, notifies institutions to enter a negotiation. It has made significant inroads, matching 18 million shares a day as of January. Instinet Crossing Network, which trades about 11 million shares a day, with a single match at 6:30 p.m., currently handles the third-largest share volume.



**CMP**

United Business Media

Copyright © 2004/5 CMP Media, LLC | [Privacy Statement](#)

**WHAT'S NEW**

Welcome to the New  
Barron's Online

**TODAY IN  
BARRON'S ONLINE**

**May 6, 2002**

**THIS WEEK'S  
BARRON'S**

**COMPANY  
STORIES**

**MARKET  
COMMENTARY**

**ELECTRONIC  
INVESTING**

**Q & A /  
MUTUAL FUNDS**

**MARKET LAB**

**YOUR PORTFOLIO**

**SEARCH /  
ARCHIVES**

**HELP**

**CONTACT US**

**PRINT  
SUBSCRIPTIONS**

**SUBSCRIBE**

**LEARN MORE**

**FRONT PAGE**

**MONEY &  
INVESTING**

**MARKETS  
DATA CENTER**

**PRIVACY POLICY**

**BARRON'S**

**BARRON'S  
Online™**

**EDITORIAL COMMENTARY**

**A New Law of Large Networks**

**Liquidnet, an institutional trading system, shows that bigger is not always better**

**By THOMAS G. DONLAN**

**A**ccording to the popular theories of networks, the value of a network rises almost as fast as the square of the number of nodes on it. Start with a single telephone (or Website or networked computer): It is useless. Two telephones enable two people to communicate. Four telephones allow each user to communicate with three other people, for a total of six possible two-way conversations (A with B, A with C, A with D, B with C and D, C with D.) Doubling the number of telephones allows double the number of simultaneous conversations, but with eight members of the network there are 28 different possible two-way conversations -- more than four times as many, with only double the number of users.

Every time a phone is added to the network, the new phone's owner can connect with all the previous members of the network, and they with him. Strictly speaking, the number of possible conversations is the square of the number of users, minus the number of users (to eliminate solipsistic conversations), and that divided by two to eliminate the double counting of conversations (A talks to B and B talks to A), since we only want to count their conversation once.

As the network gets larger, the relationship between the number of nodes and the number of possible connections gets closer to half the square of the number of members of the network. If the network connects 10 people, 45 different connections are possible; if it connects 100 people, there are 4,950 possible connections; if it connects a million people, nearly half a trillion different two-way connections are possible.

**Metcalf's Law**

At the dawn of the Internet era, Robert W. Metcalfe, designer of the Ethernet network technology and founder of 3Com, ignored the complexities and propounded a simple "law" that says the value of a

network is proportional to the square of the number of nodes. It's not really a law, however, but an observation, like Moore's Law -- in which Intel founder Gordon Moore observed that the number of transistors on a chip doubles every 18 months.

Metcalfe's Law has been much abused. It was the foundation for the fantastical vision of a New Economy with universal electronic markets, justifying speculators' wild scramble for early dominance of new dot-com markets: Once established, a network of job-seekers or junk-sellers supposedly would be so valuable to the users that no later network could be established to compete against it.

Despite the late unpleasantness in the Internet economy and on the stock market, which demonstrated how easy it can be to shoot a "first mover" in the back, the network effect is still an article of New Economic faith, and still is widely expected to produce inexhaustible demand for bandwidth. Since every node added to a network makes each existing node more valuable, trees may yet grow to the sky.

Well, maybe not.

There is a necessary qualification for Metcalfe's Law: A growth in value, whatever the value is, can occur with the addition of each user if all the users of a network are of equal weight and if all the information being exchanged is of equal significance. If not, some of the additional nodes do not add as much value as others. Worse, if they are just noise, they subtract value.

On the Internet, as the famous New Yorker cartoon had it, nobody knows you are a dog. That's why democracy does not always work there. Like buyers and sellers in a marketplace, all users of networks are not equal. For example, those who wish to use a message board to exchange rational comments on stocks are crowded off many such sites by morons whose limited creative capacity has been devoted to the composition of invective. When such an idiot logs in, he does not increase the value of the system to all other users. Message boards, like magazines, need editors.

## Trading Networks

The members of the investment community knew this instinctively when they created the early non-electronic information network called the New York Stock Exchange. They limited membership and made sure that the members would have to pay to join. Retail customers were excluded, and had to pay commissions to trade through brokers. This was not snobbery; it was good market organization.

Over the years, especially in the last thirty years, the stock markets have lost most of their exclusivity, partly responding to the demands of the marketplace and partly because of prodding from the Securities and

### Exchange Commission.

Fixed brokers' commissions are now almost forgotten, along with daily volume of less than 5 million shares. Brokers bypass the exchange and trade with their customers, or route their customers' business to alternative trading systems. Information about trades and trading is widely and rapidly accessible to investors and speculators around the globe. The Nasdaq stock market and many foreign exchanges don't even have trading floors.

Retail traders can sit in their basements riding herd on an assortment of computer screens and, at a cost, have as much information about the ebb and flow of the markets as anyone on the floor of an exchange or the trading room of a mighty investment bank. Decimalization and other regulatory mandates have secured such traders the blessings of low commissions and narrow spreads between bids and asking prices.

But for some users, the stock market is something much too much like a Yahoo chat room. The biggest institutions are being out-shouted by the crowd of small traders. In particular, the thin spreads benefit only the little guy: Maybe he can have Microsoft at 52.12, a thin dime more than he can sell it for, but he will probably only get 100 shares before the price starts to move against him.

What about the big institution that wants to buy or sell 250,000 shares at a time?

No stock market has ever had the liquidity to absorb large block trades on the floor of the exchange. The network of all buyers and sellers does a good job setting retail prices, but cannot offer wholesale volume. Posting a bid to buy even 50,000 shares of even the biggest, most liquid stock is like wearing a sign saying "kick me."

Big-block traders, such as banks and mutual funds, have had two solutions, neither very satisfactory. In the "upstairs market," buyers can engage a large-block trader at a major brokerage to hunt down large-block sellers among their clients, or through the worldwide rumor mill. Or they can break up their orders into relatively tiny retail pieces and feed the pieces into the market over time.

One problem is that there are too many helpers for each deal. Information about one's intentions inevitably leaks out and moves the market before the deal is done. There are so many nodes in the stock market network that nobody can keep a secret. The other major problem is that either process takes time, and time is money.

### Redesigning Exclusivity

The solution to the noisy message board full of yahoos is to close it off, making it a membership club -- actually a small kingdom where an

**Liquidnet**, and it celebrated its first birthday last month.

All these anonymous messages show up inside the institutions' own order-management systems, which are linked to the Liquidnet system just as they are linked to the exchanges and other trading systems. (Liquidnet's founder and CEO, Seth Merrin, was an early developer of institutional order-management systems back in the 1980s.)

[Return to top of page](#)

**REPRODUCTIONS REQUIRE FURTHER PERMISSION**

**www.djreprints.com**

BUSINESS/FINANCIAL DESK

## **ARTICLE 15**

### **Market Place; Shhh, Liquidnet is quietly trading stocks in huge blocks for institutional investors.**

By JENNY ANDERSON (NYT) 893 words

Published: February 23, 2005

Meet what one money manager calls "Napster for stocks."

Like Napster, which shook up the music industry with its file-sharing network, Liquidnet has pioneered an electronic marketplace that allows institutional investors to trade large blocks of stock anonymously.

In a sign of how valuable such electronic trading power is, Liquidnet, which began operations in 2001, has just completed a financing deal that values the privately held company at \$1.8 billion, according to a person close to the transaction.

By comparison, the publicly traded electronic network leader, Archipelago, has a market value of \$873 million. Nasdaq has a value of about \$794 million, while the New York Stock Exchange, a nonprofit organization that has said it will explore the possibility of a public offering, is worth about \$1.3 billion based on the price of its membership seats.

"The institutional equities business has been a money-losing business for almost five years," said Seth Merrin, the 44-year-old co-founder and chief executive of Liquidnet. "The trend has been toward electronic."

Liquidnet can command such a large price tag because it allows some 350 institutions to trade huge blocks -- on average 40,000 shares, more than 80 times the size of an average order on the New York Stock Exchange -- rather than forcing those institutions to cut up and parcel out the blocks into small shares, trying to trade the shares quietly so that the market does not move against the trade.

"Liquidnet was the first to bring the liquidity to you rather than us carving up our order flow and sending it out," said John J. Wheeler, director of United States equity trading at American Century Investments, a \$100 billion asset mutual fund company and early client of Liquidnet. "The beauty is anonymity, lower rates than full-service brokers and it comes to you versus you having to go out."

Traditional brokerage firms face a number of conflicts inherent in managing their huge order flow. Chief among them is suspicion that they use their trading to the firm's own advantage -- an issue the Securities and Exchange Commission is investigating.

According to a study conducted by TowerGroup, 10 years ago about 70 percent of orders from institutional traders went to Wall Street block trading desks. Today, that number has fallen to about 28 percent, with electronic venues absorbing the difference.

The problem firms have "is trustworthiness," said Jamie Selway, a managing director at White Cap Trading, an institutional brokerage firm. "On Liquidnet, there's no information leakage," meaning information about a trade is not leaked to the market.

Liquidnet is selective about its client base, meaning that the firms that trade on it can be assured that they are not being outmaneuvered by hedge funds looking to make a quick buck.

"They are the gated community of electronic trading systems; a select group participate, only blue-chip money managers," Mr. Selway said.

The firm had to persuade customers to allow it to access their book of trades, the only way in which it would be able to find enough orders to match. Mr. Merrin said, "The new paradigm is order flow is portable."

Mr. Wheeler of American Century Investment is the one who describes it as "Napster for stocks."

"It's reading our open-order file and matching buyers and sellers in cyberspace and then you can choose to interact with the contra order or not," he said.

Liquidnet sold a minority stake in the company late last week for \$250 million to Summit Partners and Technology Crossover Ventures, allowing some of the firm's early backers, including among others TH Lee Putnam Ventures and Michael Price, to cash out a portion of their initial investment. Institutional Investor magazine reported that Liquidnet was in negotiations last week.

Despite the interest and growth in Liquidnet, the company is still a bit player in the trading world. In the fourth quarter, its average daily volume rose to 23 million shares a day, a 77 percent increase over the period a year earlier, but small compared with the 1.5 billion shares traded each day at the New York Stock Exchange.

But Liquidnet has low overhead and a huge potential for growth. Among trading platforms, there has been a mad scramble to consolidate order flow -- institutions' stock, bond and derivative trades -- while at the same time minimizing costs in what has become a very low-margin business. The rationale is simple: the network or exchange or alternative system that attracts the most orders from big money managers looking to buy and sell shares will ideally be able to offer the most choices, the best prices and the least amount of friction in trying to get the trade done -- all critical factors to traders. In trader parlance, liquidity (trades) begets liquidity (more trades).

"Flow begets flow," said Todd Buechs, an associate analyst at Sanford C. Bernstein & Company. "If more and more people trust it and sing praises to alternate trading systems, then the network is larger and you get the benefit of a larger network.

"Early adopters blaze the trail."

[Copyright 2005 The New York Times Company](#) | [Privacy Policy](#) | [Home](#) | [Search](#) | [Corrections](#) | [Help](#) | [Back to Top](#)

**ARTICLE 16****The Banker**FOR YOUR SUBSCRIPTION CALL:  
+44 (0) 208 606 7545

The Banker

Editorial | Advertising | Subscriptions | Awards | Technology Directory

**Departments**

Home  
 News & Comment  
 Bracken  
 Viewpoint  
 Karina's Kolumn  
 Capital Markets ▼  
 FX & Derivatives ▼  
 Cash & Securities Services ▼  
 Regulatory Issues  
 Retail Banking ▼  
 Technology ▼

**Supplements**

Turkey's Economy Soars  
 Annual FX Interbank Survey  
 Portugal: New Opportunities  
 Serbia: Building Up Confidence  
 Qatar Savours Success  
 Covered Bonds: Growing Global Demand  
 Romania: EU on the Horizon  
 Qatar Financial Centre: Burning Ambition  
 Clearing & Settlement  
 Russia's Capital Markets Growth  
 Croatia: On the Accession Path  
 Saudi's Booming Economy  
 Bermuda: Paradise for Business  
 Iran: Window of Opportunity  
 Europe's hot market in covered bonds  
 More... ▼

**Regions**

Western Europe ▼  
 Central and Eastern Europe ▼  
 Middle East ▼  
 Africa ▼  
 Asia ▼  
 Americas ▼

**Internal politics divide**

Published: 06 October, 2003

Page 64

In the latest round of debate about the pros and cons of internalisation, the UK's Financial Services Authority has entered the fray with new rules governing alternative trading systems, while the US regulator is reviewing the filing for the Boston Options Exchange. *Frances Maguire* asks if this is about politics or truly in the best interests of the investor.

A storm is brewing over the securities market, on both sides of the Atlantic, and in both the equities and the derivatives markets. The row about internalisation is one that threatens to strike at the very heart of how securities are traded, and centres on somewhat academic arguments as to whether transparency, liquidity and best execution can sit comfortably together. Put simply, the argument against internalisation is this: internalisation – the practice of matching large orders outside of the main market mechanisms so that the orders can be executed with minimal market impact – impairs transparency, which must therefore be bad news for investors.

The Financial Services Authority (FSA) is one such antagonist. It believes that greater transparency in the equities markets will protect the retail investor. In July, the UK regulator issued its final rules for alternative trading systems (ATSs) which will come into force in April 2004. They will increase the level of pre-trade transparency – requiring publication of information about orders and quotes – and, says the FSA, enhance market monitoring of trading platforms.

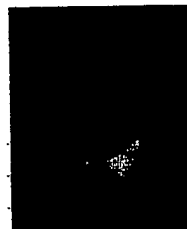
Yet others point out that the rules could in fact be costly to retail investments as the large orders in question are executed on behalf of pension and other funds managed by institutional players – who could see dramatic changes in portfolios when trying to manage large sell and buy orders if internalisation is curtailed. Opponents to the new regulations argue that if you accept the view that, in any market, the price should be lowered when you buy in bulk, and that you are much more likely to find a better price from someone needing to sell (a natural seller) than from someone making a market in the goods, you have, in essence, the heart of the defence against further limits upon internalisation.

**Best execution**

John Romeo, director, capital markets, at consultancy Mercer Oliver Wyman in London, believes that no considerations about internalisation can be made without reference to best execution. He says: "The growing market and regulatory need towards proving best execution to the client actually supports the value of internalising order flow. While best execution can be shown in the most liquid stocks, it is virtually impossible to show that trades in illiquid stocks have been executed at the best price. To further limit the use of internalisation is simply trading off risk management for transparency."

This view is backed up by the banking associations, some of which will go one step further in saying the quest for transparency is even a little overrated by the regulators and regulated markets.

Timothy Baker, director at the London Investment Bankers Association (LIBA), says: "Transparency is a good thing only up to a point. It is the quality of the markets and the liquidity they create that need to be considered against the value of transparency. LIBA's concern is that banks are able to serve their



John Romeo: "To further limit the use of internalisation is simply trading off risk management for transparency"

**Search the archive**

**Rankings Database**

Rankings Database

**News by email**

Your e-mail address

DO YOU QUALIFY  
 FOR A FREE  
 SUBSCRIPTION  
 TO THE BANKER?

Banker

Banker

Banker

FOR SALE

CLICK HERE TO  
 REGISTER AND  
 CLAIM YOUR  
 FREE ISSUES

## Awards

Central Banker & Finance  
Minister of the year 2005 ▼  
The Banker Awards 2004 ▼  
Technology Awards 2004  
Deals of the Year 2004 ▼  
Central Banker & Finance  
Minister of the year 2004 ▼  
Company Awards 2003  
The Banker Awards 2003 ▼  
Technology Awards 2003  
Deals of the Year

## Surveys & Reports

Corporate Showcase 2004  
Top 200 Asian Banks 2004  
Top 300 European Banks  
2004  
Top 100 Latin American Banks  
Banks of the Future  
Foreign-owned Banks in  
London  
Top 1000 World Banks 2004  
More... ▼

## Archives

2005 ▼  
2004 ▼  
2003 ▼  
2002 ▼  
2001 ▼  
2000 ▼  
1999 ▼

customer base without their needs being impeded by regulation based on the theoretical importance of transparency, to the detriment of the quality of the market."

## Defensive line

LIBA has long argued against the exchanges that have been pushing for regulators to ban internalisation, responding fairly extensively to pan-European exchange Euronext's paper on internalisation with one of its own in May 2002, entitled Innovation, Competition, Diversity, Choice – A European Capital Market for the 21st Century.

Mr Baker adds: "There are many reasons why a bank may seek to internalise order flow besides price – to give the customer immediacy of execution or to enable transactions that customers are not able to do on exchanges or ATSS. With such a diverse industry, a diversity of products is needed."

Earlier this year, the ATSSs operating in the UK came under scrutiny from the FSA, resulting in the new rules that will come into effect next April. Some argue that the rules are highly "targeted". Because ATSSs Posit and E-Crossnet match orders at the mid-market price at set times each day, the regulations have little impact – 'mid-market' pricing is seen as transparent enough. But US-based Liquidnet, which has brought a very different model to Europe, is a different story. It enables firms to up-load their order books into the Liquidnet system and searches for matches between buyers and seller of equities, alerting firms when a match is found to enable them to negotiate prices bilaterally. The FSA's demand for pre-trade transparency flies in the face of this.

Liquidnet, naturally, is unwilling at present to comment on potential outcomes or ramifications for its trading model. John Barker, Liquidnet's European managing director, says: "We are currently in discussions with the FSA and are optimistic that we will be able meet the applicable ATS requirements to the satisfaction of the FSA and the company."

But Liquidnet stoutly defends its model thus: as the execution size on the exchanges continue to decline, it becomes increasingly difficult for fund managers to trade their large orders. Liquidnet enables institutions to deal large block trades efficiently. Fearful of market impact and other hidden transaction costs, institutions are forced to break up their large orders into small pieces – leaving the majority of the liquidity on the trading desk while a small portion of the order is executed in the marketplace. "Searching for that liquidity is very costly. Liquidnet helps institutions eliminate those costs by bringing natural contras together and enabling them to negotiate directly and anonymously," says Mr Barker.

## Backing up

The FSA has given some ground. In the policy document posted on its website in June, the FSA states: "Our proposals to introduce pre-trade transparency obligations (ie, requiring publication of information about orders and quotes) for ATSSs in a broad range of instrument markets aroused significant opposition. Some respondents observed that investors do not necessarily want or benefit from blanket pre-trade transparency where they have decided that confidential trading enables them to reduce their costs or find new liquidity that cannot be found on the market."

The regulator has accepted that a balance between transparency and liquidity needs to be struck and has concluded that, outside of the equities markets, it will not require pre-trade information to be made available at this time. This is the biggest departure from the proposals in the original consultation paper (CP153). However, it argues that the main reason for making the distinction between equities and other markets is the larger number of retail investors in equities, as well as the greater degree of transparency already available through regulated markets.

## Derivatives debate

Other markets are having a similar debate about whether on not internalisation is in the interests of the customer and the requirement for brokers to show best execution is spilling over into the derivatives market. Best execution is a slightly different concept in the derivatives market because most exchange-traded contracts are non-fungible – ie, the market for a listed futures contract usually held in one place, one exchange, in contrast to equities, which can be bought at one exchange or electronic communications network and sold on another. For

## Poll

How long will it take to have cross border retail banking in the EU?

- ☐ 5 years  
☐ 5 to 20 years  
☐ Never

[Vote Now](#)

Current Results  
Last Results: Does Paul  
Wolfowitz hold the  
appropriate experience and  
qualifications to be  
President of the World  
Bank?  
Past Results

**The Banker**  
CORPORATE  
GOVERNANCE

**CREDIT RISK-  
REALITY CHECK**

**LONDON STOCK  
EXCHANGE  
20.10.2005**

**LONDON  
24.11.2005**

**PENSIONS  
week**

**LONDON STOCK  
EXCHANGE  
16 NOVEMBER 2005**



futures, the market guarantees the best price. In the over-the-counter (OTC) market, where contracts are bi-laterally traded, it is a completely different story.

However, in exchange-traded futures, internalisation still occurs, where the agent (futures broker) might take the other side of an order. Here the firms cherry-pick orders and profit from internalisation. Opponents to internalisation believe these orders should be exposed to customers to enable those that are not necessarily benefiting from internalisation to shop around and get a better price. But because the OTC market is much larger than the exchange-traded derivatives market, there is less transparency here than in equities. This has, in turn, led to its own problems. The trend towards anonymity is slowing because of the lack of information. Now the search is on for liquidity and information, to the extent that some electronic trading platforms are becoming more of a hybrid between OTC and exchange markets in seeking to show best prices – and moving away from internalisation.

### Pragmatic Europe

In the "pragmatism versus ideals" debate, this pragmatism is more prevalent in Europe where there are better off-exchange, OTC trading and block trading practices in place at the exchanges. Eurex and, to a lesser extent, Euronext.liffe enable block trading to be carried out in some of the bigger contracts.

The London Stock Exchange (LSE) has also been one of the most innovative equities exchanges in terms of offering block trading. When the SETS electronic order book was launched in 1997, a Work Principle Agreement was established that allows firms with large orders to report the orders to the exchange's surveillance team and depending upon the size, the order would be given time to unwind before being reported at the end of day, or when a certain amount of the order has been filled.

While some of the US stock exchanges enable crossing of trades, none have gone this far, hence the reason the ATSS were born in the US. Although the LSE does not publish the figures, it is estimated that block trading makes up around 20% of the exchange's traded volumes.

The fact that banks themselves refuse to discuss publicly their views on whether internalising order flow should be limited or banned indicates the political nature of the issue – and the cost to their bottom lines.

The jury is still out on whether internalisation harms the investor, or simply takes order flow away from the regulated markets, hence hurting the exchanges commercially. But what is clear, as more exchanges demutualise and become for-profit entities rather than not-for-profit member-owned organisations, is that this debate can only get more intense.



Printer friendly version



Email this to a friend

Headlines from other FT Business publications

#### European Pensions & Investment News

- Swedish government takes AP funds to task over costs
- Doing up an 'old banger'
- Seeking sanctuary from reality?

#### fDi Magazine

- Inside fDi
- Think Canadian Aerospace
- US CITIES & STATES OF THE FUTURE 2005/06

#### FT Mandate

- Assembling the troops for a European institutional strike
- Investors need guardian angels
- No direct Access to UK

#### Pensions Management - The Magazine For Pensions Professionals

- Freedom and opportunities in property
- A vital strategy tool
- Trustee professionalism pays dividends

#### Professional Wealth Management

- Learn the ins and outs of Italian funds market
  - Portable alpha gives hedge funds a run for their money
  - The art of product design
- 

[Subscription](#)  
[Advertising](#)  
[Privacy policy](#)  
[Webmaster](#)

Mailing address: Financial Times Business Ltd, Tabernacle Court, 16-28 Tabernacle Street, London EC2A 4DD, UK  
Phone number: +44 (0)20 7382 8000

© The Banker - 2005

Click here to view this company's customized World Business Review video segment.

### **Liquidnet, Inc.**

*Institutional investors grapple with a number of issues by virtue of the nature of their industry. Not only have they outgrown the current market structure in many respects, but they also face the perennial challenge of maintaining their anonymity. The efficiencies that the Internet has created for retail trading have not translated into material benefits to the institutional trader. Decimalization--change in representation of stock pricing from fractions to decimals (pennies)--and a number of other hidden transaction costs combine to cost institutions more than \$100 billion annually. This edition of World Business Review: On Location focuses on a company that provides a solution to two of the biggest problems that institutional asset managers face: accessing liquidity and increasing anonymity.*

Liquidnet, Inc. is created to be the first institutional e-brokerage firm that addresses the buy side community exclusively. Through its Internet-enhanced technologies, Liquidnet is establishing a community of large asset managers to trade large blocks of stock among themselves anonymously, without third party intervention, and with significantly reduced transaction costs.

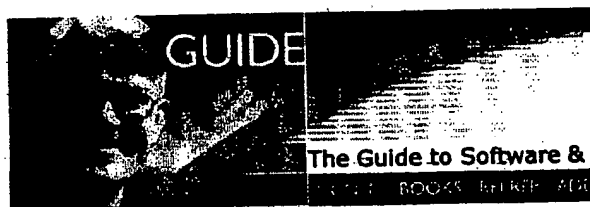
The keys to Liquidnet's success are its unique system architecture and business model, which are developed to solve the main problem facing new execution venues: gaining a critical mass of liquidity on day one. Additionally, the company is committed to providing complete straight-through processing--from order initiation through settlement--and to establishing a new level of world-class member services for the industry.

In the special-assignment report from New York, NY, Seth Merrin, CEO of Liquidnet, Inc., explains the reason he believes that Liquidnet is the true venue for institutional-size liquidity. "It [Liquidnet] is the only place where institutions will be able to trade the size they want, at the price they want, when they want and all in complete anonymity," said Merrin.

Liquidnet utilizes a decentralized architecture that enables all the orders of all the participants to be made available to the system, which then notifies Members of similar-size counter-parties--without revealing the identities of either party. As for the cost incursion issues associated with institutional orders, the Liquidnet system is designed to reduce hidden transaction costs, if not completely eliminate them. As institutional order sizes continue to escalate at unprecedented rates, the ability to reduce transaction costs of large block trading will become even more intrinsic to helping members of the buy side community achieve better returns.

Forward inquiries to Alfred Eskandar, Liquidnet, Inc., at 646-674-2042, e-mail [aeskandar@liquid.com](mailto:aeskandar@liquid.com), visit [www.liquidnet.com](http://www.liquidnet.com), or contact *World Business Review: On Location*, at [info@wbtrtv.com](mailto:info@wbtrtv.com).




# ARTICLE 18



The Guide to Software & Technology in Asset Management, Banking & Risk Management  
[HOME](#) [BOOKS](#) [ENTER](#) [ADD COMPANY](#) [UPDATE](#) [ABOUT](#) [HOME](#)

## Advent Software, Inc.

### Company

-  [Company information](#)
-  [Jobs](#)
-  [News](#)

### Products or services

[Geneva®](#)  
[Advent Office®](#)

### News

#### Advent's Moxy® Trade Order Management System Leads In Automated Connectivity to Trade Counterparties

San Francisco, June 15, 2005 - Advent Software, Inc. (NASDAQ: ADVS), the leading provider of software and services to the investment management industry, announces its growing list of trade connectivity destinations in its continuous effort to provide the most comprehensive trade order management solution to the buy-side.

Moxy®, Advent's trade order management system used by nearly 700 firms worldwide, provides direct connectivity to the industry's mission-critical trade counterparties, including crossing networks, FIX trading networks, direct market access providers, liquidity providers for fixed income, prime brokers, and SMA plan sponsor platforms.

Moxy® connects to hundreds of trading destinations through certified connections with leading order routing networks and trading platforms including:

- The SunGard Transaction Network
- Lava Trading
- TradeWeb
- Reuters Order Routing for Equities

In addition, Moxy® has built blotter-level integration with leading Alternative Trading System (ATS) Liquidnet for direct buy-side execution connectivity. Moxy®'s connectivity capabilities enable easy communication between Moxy® and the mission-critical systems used by buy-side managers today. Moxy® users have the flexibility to trade easily with hundreds of counterparties, streamline their workflow, and achieve a greater level of scalability than ever before.

"Our commitment is to provide investment managers with a robust trading solution that includes comprehensive connectivity to the trading partners that matter to them. Moxy® is a compelling technology solution that is easy to implement and maintain, and we're confident that our growing list of connectivity partners gives Moxy® a strong competitive advantage in the market today," said Mike Gamson, Advent's director of trade order management and compliance.



**This Page is Inserted by IFW Indexing and Scanning  
Operations and is not part of the Official Record**

**BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☒ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** \_\_\_\_\_

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.**